

# TEST REPORT



**SongDam Certification Center**  
 #706, Creation Hall, Yongin Songdam College, 61  
 Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,  
 Korea  
 Tel: +82-31-333-3220 Fax: +82-31-624-8855

Report No.:  
 SDCC-2020-00128  
 Page (1) / (135) pages



## 1. Applicant

Name ..... KAON BROADBAND CO., LTD  
 Address ..... KAONMEDIA Building, 884-3, Seongnamdae-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea  
 Date of receipt ..... June 6, 2020

## 2. Manufacturer

Name ..... KAON BROADBAND CO., LTD  
 Address ..... KAONMEDIA Building, 884-3, Seongnamdae-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea

3. Use of Report ..... For Japan MIC Certification

4. Test sample / Model ..... DOCSIS WIFI Gateway / CG3000

5. Date(s) of Test ..... July 01, 2020 ~ August 10, 2020

6. Test Standard used ..... Article 2-1-19-3

7. Environment ..... 23 °C 49 %

8. Result ..... Pass

The results shown in this test report refer only to the sample(s) tested unless otherwise stated.  
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|             |                                |                                |
|-------------|--------------------------------|--------------------------------|
| Affirmation | Tested by:                     | Technical Manager:             |
|             | Name: Jin Hee, Goo (Signature) | Name: Ui Hyun, Ryu (Signature) |

August 13, 2020

SongDam Certification Center



# TEST REPORT

|                                                                                                                   |                                                                                                                                                                                                |                                                          |  |
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## Revision History of Report

| Report No.      | Version | Issued Date     | Description          |
|-----------------|---------|-----------------|----------------------|
| SDCC-2020-00128 | Rev.00  | August 10, 2020 | Initial Issue        |
| SDCC-2020-00128 | Rev.01  | August 13, 2020 | Added test procedure |
|                 |         |                 |                      |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



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## 1. GENERAL INFORMATION

### 1.1. Applicant & Manufacturer & Test Laboratory Information

#### 1.1.1. Applicant Information

|           |                                                                                        |
|-----------|----------------------------------------------------------------------------------------|
| Applicant | KAON BROADBAND CO., LTD                                                                |
| Address   | KAONMEDIA Building, 884-3, Seongnamdae-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea |

#### 1.1.2. Manufacturer Information

|              |                                                                                        |
|--------------|----------------------------------------------------------------------------------------|
| Manufacturer | KAON BROADBAND CO., LTD                                                                |
| Address      | KAONMEDIA Building, 884-3, Seongnamdae-ro, Bundang-gu, Seongnam-si, Gyeonggi-do, Korea |

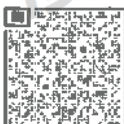
#### 1.1.3. Test Laboratory Information

|                                   |                                                                                                            |
|-----------------------------------|------------------------------------------------------------------------------------------------------------|
| Conducted tests were performed at |                                                                                                            |
| Laboratory                        | SongDam Certification Center                                                                               |
| Address                           | #601, Creation Hall, Yongin Songdam College, 61 Dongbu-ro, Cheoin-gu, Yongin-si, Gyeonggi-do, 17145, Korea |
| KOLAS No.                         | KT790                                                                                                      |
| Telephone No.                     | +82-31-333-3220                                                                                            |
| Fax No.                           | +82-31-624-8855                                                                                            |

### 1.2. Applicable Standards

According to the specifications of the manufacturer, the EUT must comply with the requirements of the following standards:

|                       |                                                       |
|-----------------------|-------------------------------------------------------|
| Test method           | According to Table No.45 of Notification No.88 of MIC |
| Technical standard(s) | Article 2-1-19-3                                      |



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## 1.3. General Description of EUT

|                           |                                                                                                                                                                                                                                        |
|---------------------------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Product Name              | DOCSIS WIFI Gateway                                                                                                                                                                                                                    |
| Model Name                | CG3000                                                                                                                                                                                                                                 |
| Operating Band            | 5 150 MHz ~ 5 350 MHz, 5 470 MHz ~ 5 730 MHz                                                                                                                                                                                           |
| Operating Frequency Range | 802.11a/n/ac (20 MHz BW):<br>5 180 MHz ~ 5 320 MHz and 5 500 MHz ~ 5 720 MHz<br>802.11n/ac (40 MHz BW):<br>5 190 MHz ~ 5 310 MHz and 5 510 MHz ~ 5 710 MHz<br>802.11ac (80 MHz BW):<br>5 210 MHz ~ 5 290 MHz and 5 530 MHz ~ 5 690 MHz |
| Equipment Type            | 802.11a, 802.11n (HT20), 802.11n (HT40), 802.11ac (VHT20),<br>802.11ac (VHT40), 802.11ac (VHT80)                                                                                                                                       |
| Type of Modulation        | OFDM (256QAM, 64QAM, 16QAM, QPSK)                                                                                                                                                                                                      |
| 802.11 / Data rate (mbps) | 802.11a : Up to 54 Mbps, 802.11n HT20 (MCS 0 ~31),<br>802.11n HT40 (MCS 0 ~31), 802.11ac VHT20 (MCS 0 ~9),<br>802.11ac VHT40 (MCS 0 ~9), 802.11ac VHT80 (MCS 0 ~9)                                                                     |
| Declaration Output Power  | 802.11a: 6mW/MHz, 802.11n(VHT20): 4mW/MHz, 802.11n(HT40):3mW/MHz<br>802.11ac(VHT20): 5mW/MHz, 802.11ac(VHT40): 3mW/MHz,<br>802.11ac(VHT80): 2mW/MHz                                                                                    |
| HW/SW Version             | HW: Rev1.4 / SW: v1.02.12                                                                                                                                                                                                              |
| Temperature Range         | 0 °C to 40 °C                                                                                                                                                                                                                          |
| Power Supply              | DC 12 V                                                                                                                                                                                                                                |
| Antenna Type              | Integral Antenna (U.FL Antenna)                                                                                                                                                                                                        |
| Antenna Gain              | 2 dBi                                                                                                                                                                                                                                  |
| Number of Antenna         | 4 (4T4R)                                                                                                                                                                                                                               |

Note: 802.11a support SISO and 802.11n(HT20/HT40)and 802.11ac(VHT20, VHT40, VHT80) support MIMO.

## 1.4. Description Test Modes

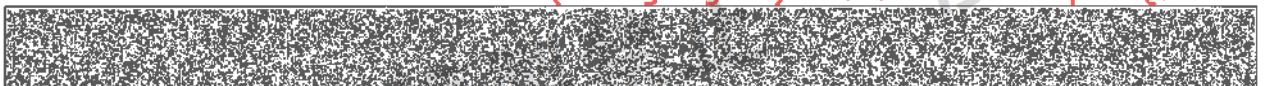
The EUT has been tested under Normal Operating condition. Pre-defined engineering program for regulatory testing used to control the EUT for staying in continuous transmitting and receiving mode is programmed.

|           |                |
|-----------|----------------|
| Test Tool | Broadcom MTool |
|-----------|----------------|

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## 1.5. Maximum Measurement Uncertainty

The measurement uncertainties given below are based on a 95 % confidence level (based on a coverage factor ( $k = 2$ ))

| Parameter                     | Limit   |
|-------------------------------|---------|
| RF output power, conducted    | 1.13 dB |
| Unwanted Emissions, conducted | 2.39 dB |
| Temperature                   | 1 °C    |
| Humidity                      | 3 %     |

## 1.6. Test Condition

|                  |                                 |                        |              |
|------------------|---------------------------------|------------------------|--------------|
| Normal Condition | Temperature / Relative Humidity |                        | 23 °C / 49 % |
|                  | Power source                    | Normal voltage (Rated) | 12 Vdc       |
|                  |                                 | Upper voltage          | 13.2 Vdc     |
|                  |                                 | Lower voltage          | 10.8 Vdc     |



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## 1.7. Construction Protection Confirmation

### 1.7.1. Limit

The high-frequency section and modulation section of the radio equipment except for the antenna system shall not be capable of being opened easily.

### 1.7.2. Confirmation method

The RF and modulation portions are protected against illegal modification as following method

|   |                                                                                                                                                           |
|---|-----------------------------------------------------------------------------------------------------------------------------------------------------------|
| ✓ | Sealed with special screws.                                                                                                                               |
|   | Plastic chassis is being welded using ultrasonic waves.                                                                                                   |
|   | Chassis is glued using a special adhesive.                                                                                                                |
|   | Metal covers are spot-fused.                                                                                                                              |
|   | Cover is specially interlocked.                                                                                                                           |
|   | RF and Modulation components are covered with shielding case and this shielding case is soldered.                                                         |
|   | Shield case is welded at RF and modulation parts, and ID-ROM is welded using the BGA Method.                                                              |
|   | Shield case is welded at RF and modulation parts, and ID-ROM is glued at its lead with a special adhesive                                                 |
|   | Shield case is welded at RF and modulation parts, and ID-ROM is glued with a non-transparent laminating agent.                                            |
|   | RF and Modulation parts are mounted on PCB with surface mount technology, and there is no any adjustable part on PCB or adjustable parts are not exposed. |

### 1.7.3. Test Result

| Result                                                                               |  |
|--------------------------------------------------------------------------------------|--|
| Good (Star screw) / Pass                                                             |  |
|  |  |

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## 2. TEST EQUIPMENT

All test equipment is calibrated by a calibration laboratory accredited to the requirements of ISO 17025.

| Conducted test              |                  |              |            |                  |            |
|-----------------------------|------------------|--------------|------------|------------------|------------|
| Equipment                   | Model            | Manufacturer | Serial No. | Calibration Date | Due Date   |
| PXA SIGNAL ANALYZER         | N9030A           | KEYSIGHT     | MY55410718 | 2019-10-23       | 2020-10-23 |
| MXA SIGNAL ANALYZER         | N9020A           | KEYSIGHT     | MY52090473 | 2019-10-23       | 2020-10-23 |
| MXG ANALOG SIGNAL GENERATOR | N5183B           | KEYSIGHT     | MY53271390 | 2019-10-23       | 2020-10-23 |
| EXG VECTOR SIGNAL GENERATOR | N5172B           | KEYSIGHT     | MY56200197 | 2019-10-23       | 2020-10-23 |
| Power Meter                 | N1911A           | KEYSIGHT     | MY56410004 | 2019-10-28       | 2020-10-28 |
| Power Sensor                | N1911A           | KEYSIGHT     | MY56410004 | 2019-10-28       | 2020-10-28 |
| DC POWER SUPPLY             | E3632A           | KEYSIGHT     | MY59206342 | 2019-10-23       | 2020-10-23 |
| ETSI ADAPTIVITY TEST SET    | AD211-ADAPTIVITY | KEYSIGHT     | TW5451142  | 2019-10-25       | 2020-10-25 |

## 3. TEST PROCEDURE

### 3.1.1. Frequency Error

#### 3.1.1.1. Measuring procedures

- 3.1.1.1.1. Set the EUT at modulation off.
- 3.1.1.1.2. Set the EUT operates at channel low, mid and high and normal voltage.
- 3.1.1.1.3. Set SA is following as:  
 Center Frequency: the center frequency of testing for EUT  
 RBW: auto  
 VBW: auto  
 Span: 200kHz  
 Sweep time: Auto  
 Detector mode: Positive Peak  
 Trace mode: Clear Write  
 Mark function: Frequency Counter  
 Marker Max. level to get measuring frequency (RF).
- 3.1.1.1.4. Varied input voltage to + 10% (Upper voltage) and - 10% (Lower voltage) of rated voltage  
 The frequency error formula is  $FT (ppm) = (RF - MF) / MF \times 10^6$ .  
 (FT: Frequency Tolerance, RF: Reading Frequency, MF: Measurement Frequency)

#### 3.1.1.2. Limit

Tolerance:  $\pm 20 \times 10^{-6}$

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## 3.1.2. Occupied Bandwidth

### 3.1.2.1. Measuring procedures

- 3.1.2.1.1. Set the EUT at modulation on.
- 3.1.2.1.2. Set the EUT operates at channel low, mid and high and normal voltage.
- 3.1.2.1.3. Set SA is following as:
  - Center Frequency: the center frequency of testing for EUT
  - RBW: Approximately 3% or less of the tolerance
  - VBW: Approximately same as the resolution bandwidth
  - Span: Approximately 2 to 3.5 times wider than the tolerance
  - Sweep time: Auto
  - Detector mode: Positive Peak
  - Trace mode: Max
  - 99% spectrum OBW function on to measure occupied bandwidth
- 3.1.2.1.4. Varied input voltage to + 10% (Upper voltage) and - 10% (Lower voltage) of rated voltage

### 3.1.2.2. Limit

|      | Occupied Bandwidth |
|------|--------------------|
| 20 M | 20 M               |
| 40 M | 40 M               |
| 80 M | 80 M               |



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## 3.1.3. Spurious and unwanted emission and Out-Band Leakage Power Measurement

### 3.1.3.1. Measuring procedures

- 3.1.3.1.1. Set the EUT to transmit at rated power and channel to perform test.  
 3.1.3.1.2. Set the EUT operates at hopping mode and normal voltage.  
 3.1.3.1.3. Set SA is following as:  
 RBW: 100 kHz (1 GHz under) / 1 MHz (over 1 GHz)  
 VBW: 100 kHz (1 GHz under) / 1 MHz (over 1 GHz)  
 Sweep time: Auto  
 Sweep mode: Continuous sweep  
 Detector mode: Positive Peak  
 Trace mode: Maximum hold  
 Marker Max. level.

### 3.1.3.2. Limit

| Range                                      | OBW: 18 MHz under                       | Range               | OBW: 18 - 20 MHz                        |
|--------------------------------------------|-----------------------------------------|---------------------|-----------------------------------------|
| ~ 5 142 MHz                                | 2.5 $\mu$ W/MHz                         | ~ 5 142 MHz         | 2.5 $\mu$ W/MHz                         |
| 5 142 ~ 5 150 MHz                          | 15 $\mu$ W/MHz                          | 5 142 ~ 5 150 MHz   | 15 $\mu$ W/MHz                          |
| 5 250 ~ 5 251 MHz                          | $10^{1-(\frac{8}{3})(f-9)}$ mW/MHz      | 5 250 ~ 5 250.2 MHz | $10^{1-(\frac{8}{3})(f-9.75)}$ mW/MHz   |
| 5 251 ~ 5 260 MHz                          | $10^{-1-(\frac{8}{50})(f-11)}$ mW/MHz   | 5 250.2 ~ 5 251 MHz | $10^{1-(f-9)}$ mW/MHz                   |
| 5 260 ~ 5 266.7 MHz                        | $10^{-1.8-(\frac{6}{50})(f-20)}$ mW/MHz | 5 251 ~ 5 260 MHz   | $10^{-1-(\frac{8}{50})(f-11)}$ mW/MHz   |
| 5 266.7 MHz ~                              | 2.5 $\mu$ W/MHz                         | 5 260 ~ 5 266.7 MHz | $10^{-1.8-(\frac{6}{50})(f-20)}$ mW/MHz |
|                                            |                                         | 5 266.7 MHz ~       | 2.5 $\mu$ W/MHz                         |
| Note) f = Measured frequency (MHz) - 5 240 |                                         |                     |                                         |

| Range                                      | OBW: 20 - 40 MHz                                          | Range                                      | OBW: 40 - 80 MHz                                           |
|--------------------------------------------|-----------------------------------------------------------|--------------------------------------------|------------------------------------------------------------|
| ~ 5 141.6 MHz                              | 2.5 $\mu$ W/MHz                                           | ~ 5 123.2 MHz                              | 2.5 $\mu$ W/MHz                                            |
| 5 141.6 ~ 5 150 MHz                        | 15 $\mu$ W/MHz                                            | 5 123.2 ~ 5 150 MHz                        | 15 $\mu$ W/MHz                                             |
| 5 250 ~ 5 251 MHz                          | $10^{-(f-20)+\log(\frac{1}{2})}$ mW/MHz                   | 5 250 ~ 5 251 MHz                          | $10^{-(f-40)+\log(\frac{1}{2})}$ mW/MHz                    |
| 5 251 ~ 5 270 MHz                          | $10^{-(\frac{8}{100})(f-21)-1+\log(\frac{1}{2})}$ mW/MHz  | 5 251 ~ 5 290 MHz                          | $10^{-(\frac{8}{300})(f-41)-1+\log(\frac{1}{2})}$ mW/MHz   |
| 5 270 ~ 5 278.4 MHz                        | $10^{-(\frac{3}{50})(f-40)-1.8+\log(\frac{1}{2})}$ mW/MHz | 5 290 ~ 5 296.7 MHz                        | $10^{-(\frac{3}{100})(f-80)-1.8+\log(\frac{1}{2})}$ mW/MHz |
| 5 278.4 MHz ~                              | 2.5 $\mu$ W/MHz                                           | 5 296.7 MHz ~                              | 2.5 $\mu$ W/MHz                                            |
| Note) f = Measured frequency (MHz) - 5 230 |                                                           | Note) f = Measured frequency (MHz) - 5 210 |                                                            |

Note: For MIMO mode, the summation results detail as bellows;  
 Frequency: consider highest frequency in order to apply worst limits



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## 3.1.4. ACLR

### 3.1.4.1. Measuring procedures

- 3.1.4.1.1. Set the EUT at modulation on.
- 3.1.4.1.2. Set the EUT operates at channel low, mid and high and normal voltage.
- 3.1.4.1.3. Set SA is following as:
  - Center Frequency: the center frequency of testing for EUT
  - RBW: 300 kHz
  - VBW: 300 kHz
  - Sweep time: Auto
  - Detector mode: Sample
  - Trace mode: Max
- 3.1.4.1.4. Varied input voltage to + 10% (Upper voltage) and - 10% (Lower voltage) of rated voltage

### 3.1.4.2. Limit

|                     | 20 MHz  | 40 MHz  | 80 MHz  |
|---------------------|---------|---------|---------|
| 20 MHz $\pm$ 10 MHz | -25 dBc | -       | -       |
| 40 MHz $\pm$ 10 MHz | -40 dBc | -       | -       |
| 20 MHz $\pm$ 20 MHz | -       | -25 dBc | -       |
| 40 MHz $\pm$ 20 MHz | -       | -40 dBc | -       |
| 80 MHz $\pm$ 40 MHz | -       | -       | -25 dBc |



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## 3.1.5. Antenna Power

### 3.1.5.1. Measuring procedures

- 3.1.5.1.1. Set the EUT at modulation on.
- 3.1.5.1.2. Set the EUT operates at channel low, mid and high and normal voltage.
- 3.1.5.1.3. Adjust the SA is following as:  
 Center Frequency: measured carrier  
 RBW: 1 MHz  
 VBW: 1 MHz  
 Detector mode: Positive Peak  
 Averaging mode: off  
 Span: zero  
 Connect the equipment  
 Set SA is following as:  
 Center Frequency: the center frequency of testing for EUT  
 RBW: 1 MHz  
 VBW: 1 MHz  
 Span: Approximately 2 to 3.5 times wider than the tolerance  
 Sweep time: Auto  
 Detector mode: Positive Peak  
 Trace mode: Max  
 Connect PM to IF output of the SA
- 3.1.5.1.4. Varied input voltage to + 10% (Upper voltage) and - 10% (Lower voltage) of rated voltage

### 3.1.5.2. Limit

|     | TPC | 20 MHz    | 40 MHz      | 80 MHz      |
|-----|-----|-----------|-------------|-------------|
| W52 | -   | 10 mW/MHz | 5 mW/MHz    | 2.5 mW/MHz  |
| W53 | X   | 5 mW/MHz  | 2.5 mW/MHz  | 1.25 mW/MHz |
|     | O   | 10 mW/MHz | 5 mW/MHz    | 2.5 mW/MHz  |
| W56 | X   | 25 mW/MHz | 12.5 mW/MHz | 6.25 mW/MHz |
|     | O   | 50 mW/MHz | 25 mW/MHz   | 12.5 mW/MHz |



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## 3.1.6. Secondary radiated emission

### 3.1.6.1. Measuring procedures

- 3.1.6.1.1. Set the EUT at rx mode.
- 3.1.6.1.2. Set the EUT operates at channel low, mid and high and normal voltage.
- 3.1.6.1.3. Set SA is following as:
  - Center Frequency: the center frequency of testing for EUT
  - RBW: 100 kHz (1 GHz under) / 1 MHz (over 1 GHz)
  - VBW: 100 kHz (1 GHz under) / 1 MHz (over 1 GHz)
  - Sweep time: Auto
  - Detector mode: Positive Peak
  - Trace mode: Max
- 3.1.6.1.4. Varied input voltage to + 10% (Upper voltage) and - 10% (Lower voltage) of rated voltage

### 3.1.6.2. Limit

|       | Below 1 GHz | 1 GHz and over |
|-------|-------------|----------------|
| Limit | 4 nW        | 20 nW          |



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|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |  |
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## 4. TEST RESULTS – W52

### 4.1. 802.11a

#### 4.1.1. Duty cycle

|            |          |       |    |
|------------|----------|-------|----|
| Duty Cycle | On       | 0.249 | ms |
|            | Off      | 0.022 | ms |
|            | On + Off | 0.271 | ms |
|            | Ratio    | 91.8  | %  |

#### 4.1.2. Declaration RF Output Power

|                       |       |         |
|-----------------------|-------|---------|
| Declaration RF Output | 6     | mW/MHz  |
| Power                 | 7.782 | dBm/MHz |
| E.I.R.P.              | 9.904 | mW/MHz  |
|                       | 9.782 | dBm/MHz |

#### 4.1.3. Test Result

##### 4.1.3.1. Lowest Channel

| Channel Number               | ch. | 36       |          |          | Result | Limit |
|------------------------------|-----|----------|----------|----------|--------|-------|
| Measurement Frequency        | MHz | 5180     |          |          |        |       |
| Voltage                      | Vdc | 10.80    | 12.00    | 13.20    | -      | -     |
| Frequency Measurements (Tx0) | MHz | 5 179.95 | 5 179.95 | 5 179.95 | -      | -     |
| Frequency Tolerance (Tx0)    | ppm | -9.589   | -9.564   | -9.548   | Pass   | ± 20  |
| Frequency Measurements (Tx1) | MHz | 5 179.95 | 5 179.95 | 5 179.95 | -      | -     |
| Frequency Tolerance (Tx1)    | ppm | -10.007  | -10.165  | -10.246  | Pass   | ± 20  |
| Frequency Measurements (Tx2) | MHz | 5 179.94 | 5 179.94 | 5 179.94 | -      | -     |
| Frequency Tolerance (Tx2)    | ppm | -11.078  | -10.954  | -10.892  | Pass   | ± 20  |
| Frequency Measurements (Tx3) | MHz | 5 179.95 | 5 179.95 | 5 179.95 | -      | -     |
| Frequency Tolerance (Tx3)    | ppm | -9.710   | -9.676   | -9.655   | Pass   | ± 20  |
| Occupied Bandwidth (Tx0)     | MHz | 16.930   | 16.930   | 16.940   | Pass   | ≤ 20  |
| Occupied Bandwidth (Tx1)     | MHz | 16.850   | 16.830   | 16.830   | Pass   | ≤ 20  |
| Occupied Bandwidth (Tx2)     | MHz | 16.780   | 16.800   | 16.760   | Pass   | ≤ 20  |

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| Channel Number                                       |           | ch.    | 36        |           |           | Result | Limit      |
|------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|------------|
| Measurement Frequency                                |           | MHz    | 5180      |           |           |        |            |
| Voltage                                              |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -          |
| Occupied Bandwidth (Tx3)                             |           | MHz    | 16.870    | 16.870    | 16.830    | Pass   | ≤ 20       |
| RF Output Power (Tx0)                                |           | mW/MHz | 3.815     | 3.796     | 3.786     | Pass   | ≤ 10.0     |
| RF Output Power Tolerance (Tx0)                      |           | %      | -36.41    | -36.73    | -36.90    | Pass   | +20 to -80 |
| RF Output Power (Tx1)                                |           | mW/MHz | 5.267     | 5.241     | 5.236     | Pass   | ≤ 10.0     |
| RF Output Power Tolerance (Tx0)                      |           | %      | -12.21    | -12.65    | -12.74    | Pass   | +20 to -80 |
| RF Output Power (Tx2)                                |           | mW/MHz | 5.403     | 5.378     | 5.369     | Pass   | ≤ 10.0     |
| RF Output Power Tolerance (Tx0)                      |           | %      | -9.95     | -10.36    | -10.52    | Pass   | +20 to -80 |
| RF Output Power (Tx3)                                |           | mW/MHz | 6.278     | 6.250     | 6.242     | Pass   | ≤ 10.0     |
| RF Output Power Tolerance (Tx0)                      |           | %      | 4.63      | 4.17      | 4.03      | Pass   | +20 to -80 |
| E.I.R.P. (Tx0)                                       |           | mW/MHz | 6.047     | 6.016     | 6.000     | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx1)                                       |           | mW/MHz | 8.348     | 8.306     | 8.298     | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx2)                                       |           | mW/MHz | 8.564     | 8.524     | 8.509     | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx3)                                       |           | mW/MHz | 9.949     | 9.906     | 9.892     | Pass   | ≤ 10.0     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength (Tx0) | 30 to     | uW/MHz | 0.124     | 0.096     | 0.098     | Pass   | ≤ 2.5      |
|                                                      | 5135 MHz  | MHz    | 5 135.00  | 5 104.37  | 5 104.37  | -      | -          |
|                                                      | 5365 to   | uW/MHz | 0.149     | 0.210     | 0.177     | Pass   | ≤ 2.5      |
|                                                      | 26000 MHz | MHz    | 25 236.51 | 24 328.57 | 23 668.25 | -      | -          |
| Unwanted<br>(Spurious)<br>Emission<br>Strength (Tx1) | 30 to     | uW/MHz | 0.446     | 0.346     | 0.392     | Pass   | ≤ 2.5      |
|                                                      | 5135 MHz  | MHz    | 5 135.00  | 5 135.00  | 5 135.00  | -      | -          |
|                                                      | 5365 to   | uW/MHz | 0.177     | 0.159     | 0.177     | Pass   | ≤ 2.5      |
|                                                      | 26000 MHz | MHz    | 24 926.98 | 25 587.30 | 24 390.47 | -      | -          |
| Unwanted<br>(Spurious)<br>Emission<br>Strength (Tx2) | 30 to     | uW/MHz | 0.321     | 0.327     | 0.343     | Pass   | ≤ 2.5      |
|                                                      | 5135 MHz  | MHz    | 5 135.00  | 5 135.00  | 5 135.00  | -      | -          |
|                                                      | 5365 to   | uW/MHz | 0.161     | 0.166     | 0.168     | Pass   | ≤ 2.5      |
|                                                      | 26000 MHz | MHz    | 24 411.11 | 24 266.66 | 24 988.89 | -      | -          |
| Unwanted<br>(Spurious)<br>Emission<br>Strength (Tx3) | 30 to     | uW/MHz | 0.221     | 0.209     | 0.186     | Pass   | ≤ 2.5      |
|                                                      | 5135 MHz  | MHz    | 5 135.00  | 5 135.00  | 5 135.00  | -      | -          |
|                                                      | 5365 to   | uW/MHz | 0.155     | 0.177     | 0.181     | Pass   | ≤ 2.5      |
|                                                      | 26000 MHz | MHz    | 24 720.63 | 24 638.09 | 24 411.11 | -      | -          |

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| Channel Number                                |         | ch. | 36     |        |        | Result | Limit |
|-----------------------------------------------|---------|-----|--------|--------|--------|--------|-------|
| Measurement Frequency                         |         | MHz | 5180   |        |        |        |       |
| Voltage                                       |         | Vdc | 10.80  | 12.00  | 13.20  | -      | -     |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx0) | cf      | dB  | 26.65  | 26.57  | 26.55  | -      | -     |
|                                               | -20 MHz | dB  | -27.85 | -27.95 | -27.98 | Pass   | ≤-25  |
|                                               | 20 MHz  | dB  | -26.92 | -27.03 | -27.09 | Pass   | ≤-25  |
|                                               | -40 MHz | dB  | -47.85 | -47.87 | -47.92 | Pass   | ≤-40  |
|                                               | 40 MHz  | dB  | -47.09 | -47.20 | -47.25 | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx1) | cf      | dB  | 25.54  | 25.55  | 25.54  | -      | -     |
|                                               | -20 MHz | dB  | -29.17 | -29.32 | -29.25 | Pass   | ≤-25  |
|                                               | 20 MHz  | dB  | -27.93 | -27.96 | -27.95 | Pass   | ≤-25  |
|                                               | -40 MHz | dB  | -48.66 | -48.81 | -48.76 | Pass   | ≤-40  |
|                                               | 40 MHz  | dB  | -47.92 | -47.90 | -47.88 | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx2) | cf      | dB  | 25.66  | 25.68  | 25.67  | -      | -     |
|                                               | -20 MHz | dB  | -30.11 | -30.26 | -30.27 | Pass   | ≤-25  |
|                                               | 20 MHz  | dB  | -28.94 | -28.99 | -28.98 | Pass   | ≤-25  |
|                                               | -40 MHz | dB  | -48.57 | -48.64 | -48.55 | Pass   | ≤-40  |
|                                               | 40 MHz  | dB  | -47.72 | -47.77 | -47.80 | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx3) | cf      | dB  | 26.34  | 26.36  | 26.35  | -      | -     |
|                                               | -20 MHz | dB  | -28.24 | -28.27 | -28.32 | Pass   | ≤-25  |
|                                               | 20 MHz  | dB  | -27.25 | -27.26 | -27.32 | Pass   | ≤-25  |
|                                               | -40 MHz | dB  | -48.02 | -48.10 | -48.14 | Pass   | ≤-40  |
|                                               | 40 MHz  | dB  | -47.24 | -47.36 | -47.41 | Pass   | ≤-40  |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|--|

| Channel Number               |            | ch.    | 36       |          |          | Result | Limit |
|------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency        |            | MHz    | 5180     |          |          |        |       |
| Voltage                      |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band Leakage Power (Tx0) | 5135.0 to  | uW/MHz | 0.234    | 0.211    | 0.180    | Pass   | -     |
|                              | 5142.0 MHz | MHz    | 5 141.72 | 5 138.74 | 5 141.72 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                              | 5142.0 to  | uW/MHz | 0.903    | 0.927    | 0.832    | Pass   | -     |
|                              | 5150.0 MHz | MHz    | 5 149.15 | 5 149.94 | 5 149.86 | -      | -     |
|                              | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                              | 5250.0 to  | uW/MHz | 0.105    | 0.101    | 0.084    | Pass   | -     |
|                              | 5251.0 MHz | MHz    | 5 250.97 | 5 250.24 | 5 250.92 | -      | -     |
|                              | Limit      | uW/MHz | 107.152  | 575.440  | 120.226  | -      | -     |
|                              | 5251.0 to  | uW/MHz | 0.125    | 0.115    | 0.097    | Pass   | -     |
|                              | 5260.0 MHz | MHz    | 5 255.31 | 5 252.72 | 5 254.31 | -      | -     |
|                              | Limit      | uW/MHz | 41.389   | 70.325   | 50.790   | -      | -     |
|                              | 5260.0 to  | uW/MHz | 0.112    | 0.089    | 0.095    | Pass   | -     |
|                              | 5266.7 MHz | MHz    | 5 261.86 | 5 260.64 | 5 264.39 | -      | -     |
|                              | Limit      | uW/MHz | 9.480    | 13.280   | 4.712    | -      | -     |
|                              | 5266.7 to  | uW/MHz | 0.080    | 0.064    | 0.069    | Pass   | -     |
|                              | 5365.0 MHz | MHz    | 5 266.70 | 5 267.78 | 5 267.49 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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| Channel Number                     |            | ch.    | 36       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5180     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx1) | 5135.0 to  | uW/MHz | 0.477    | 0.506    | 0.473    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 141.87 | 5 141.44 | 5 141.71 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 1.771    | 1.787    | 1.636    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.76 | 5 148.75 | 5 146.42 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.144    | 0.142    | 0.134    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.97 | 5 250.30 | 5 250.75 | -      | -     |
|                                    | Limit      | uW/MHz | 107.152  | 501.187  | 177.828  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.161    | 0.174    | 0.183    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 256.01 | 5 253.92 | 5 254.74 | -      | -     |
|                                    | Limit      | uW/MHz | 35.865   | 55.010   | 46.511   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.166    | 0.144    | 0.132    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 266.49 | 5 261.37 | 5 263.00 | -      | -     |
|                                    | Limit      | uW/MHz | 2.638    | 10.854   | 6.918    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.104    | 0.110    | 0.095    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 267.09 | 5 267.29 | 5 267.58 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 36       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5180     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx2) | 5135.0 to  | uW/MHz | 0.949    | 1.017    | 0.870    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 141.99 | 5 141.57 | 5 140.03 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 1.819    | 2.064    | 1.653    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.95 | 5 147.10 | 5 148.38 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.158    | 0.148    | 0.147    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.97 | 5 250.83 | 5 250.82 | -      | -     |
|                                    | Limit      | uW/MHz | 107.152  | 147.911  | 151.356  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.146    | 0.172    | 0.147    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 251.60 | 5 252.58 | 5 252.23 | -      | -     |
|                                    | Limit      | uW/MHz | 88.444   | 72.369   | 77.744   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.149    | 0.121    | 0.120    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 260.96 | 5 260.78 | 5 264.48 | -      | -     |
|                                    | Limit      | uW/MHz | 12.156   | 12.776   | 4.596    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.091    | 0.096    | 0.092    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 266.99 | 5 271.42 | 5 267.88 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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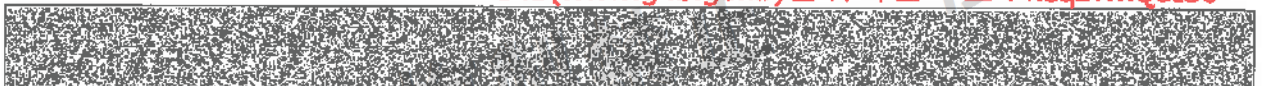
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| Channel Number                              |            | ch.    | 36        |           |           | Result | Limit |
|---------------------------------------------|------------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                       |            | MHz    | 5180      |           |           |        |       |
| Voltage                                     |            | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Out-Band Leakage Power (Tx3)                | 5135.0 to  | uW/MHz | 0.680     | 0.524     | 0.552     | Pass   | -     |
|                                             | 5142.0 MHz | MHz    | 5 140.68  | 5 141.38  | 5 140.01  | -      | -     |
|                                             | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
|                                             | 5142.0 to  | uW/MHz | 2.203     | 1.978     | 1.906     | Pass   | -     |
|                                             | 5150.0 MHz | MHz    | 5 149.74  | 5 149.58  | 5 150.00  | -      | -     |
|                                             | Limit      | uW/MHz | 15.000    | 15.000    | 15.000    | -      | -     |
|                                             | 5250.0 to  | uW/MHz | 0.161     | 0.156     | 0.155     | Pass   | -     |
|                                             | 5251.0 MHz | MHz    | 5 250.79  | 5 250.43  | 5 250.62  | -      | -     |
|                                             | Limit      | uW/MHz | 162.181   | 371.535   | 239.883   | -      | -     |
|                                             | 5251.0 to  | uW/MHz | 0.169     | 0.145     | 0.155     | Pass   | -     |
|                                             | 5260.0 MHz | MHz    | 5 256.19  | 5 254.39  | 5 253.54  | -      | -     |
|                                             | Limit      | uW/MHz | 34.567    | 49.965    | 59.460    | -      | -     |
|                                             | 5260.0 to  | uW/MHz | 0.149     | 0.151     | 0.142     | Pass   | -     |
|                                             | 5266.7 MHz | MHz    | 5 262.69  | 5 261.57  | 5 260.31  | -      | -     |
|                                             | Limit      | uW/MHz | 7.537     | 10.271    | 14.548    | -      | -     |
|                                             | 5266.7 to  | uW/MHz | 0.118     | 0.102     | 0.101     | Pass   | -     |
|                                             | 5365.0 MHz | MHz    | 5 279.38  | 5 267.09  | 5 272.01  | -      | -     |
|                                             | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
| Secondary emitted radio wave strength (Tx0) | 30 to      | nW     | 0.319     | 0.217     | 0.236     | Pass   | ≤ 4   |
|                                             | 1000 MHz   | MHz    | 56.19     | 56.19     | 56.19     | -      | -     |
|                                             | 1000 to    | nW     | 0.069     | 0.066     | 0.060     | Pass   | ≤ 20  |
|                                             | 10000 MHz  | MHz    | 3 619.00  | 3 619.00  | 3 619.00  | -      | -     |
|                                             | 10000 to   | nW     | 0.066     | 0.065     | 0.084     | Pass   | ≤ 20  |
|                                             | 26000 MHz  | MHz    | 25 856.00 | 25 984.00 | 25 728.00 | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드 : keqzWxQdI30=

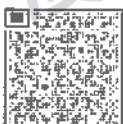


# TEST REPORT

|                                                                                   |                                                                                                                                                                                                |                                                           |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|
|  | <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-824-8855 | Report No.:<br>SDCC-2020-00128<br>Page (21) / (135) pages |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|

| Channel Number                                          |           | ch. | 36        |           |           | Result | Limit       |
|---------------------------------------------------------|-----------|-----|-----------|-----------|-----------|--------|-------------|
| Measurement Frequency                                   |           | MHz | 5180      |           |           |        |             |
| Voltage                                                 |           | Vdc | 10.80     | 12.00     | 13.20     | -      | -           |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx1) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4         |
|                                                         | 1000 MHz  | MHz | 395.69    | 924.34    | 64.92     | -      | -           |
|                                                         | 1000 to   | nW  | 0.030     | 0.035     | 0.031     | Pass   | ≤ 20        |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -           |
|                                                         | 10000 to  | nW  | 0.051     | 0.060     | 0.066     | Pass   | ≤ 20        |
|                                                         | 26000 MHz | MHz | 25 440.00 | 23 264.00 | 24 672.00 | -      | -           |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx2) | 30 to     | nW  | 0.001     | 0.001     | 0.002     | Pass   | ≤ 4         |
|                                                         | 1000 MHz  | MHz | 849.65    | 903.97    | 156.10    | -      | -           |
|                                                         | 1000 to   | nW  | 0.032     | 0.030     | 0.035     | Pass   | ≤ 20        |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -           |
|                                                         | 10000 to  | nW  | 0.073     | 0.092     | 0.069     | Pass   | ≤ 20        |
|                                                         | 26000 MHz | MHz | 24 016.00 | 25 568.00 | 23 248.00 | -      | -           |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx3) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4         |
|                                                         | 1000 MHz  | MHz | 923.37    | 249.22    | 62.98     | -      | -           |
|                                                         | 1000 to   | nW  | 0.019     | 0.016     | 0.017     | Pass   | ≤ 20        |
|                                                         | 10000 MHz | MHz | 3 169.00  | 3 718.00  | 3 727.00  | -      | -           |
|                                                         | 10000 to  | nW  | 0.068     | 0.064     | 0.091     | Pass   | ≤ 20        |
|                                                         | 26000 MHz | MHz | 24 000.00 | 23 840.00 | 21 456.00 | -      | -           |
| Burst Length of Transmitted Signals                     |           |     | Good      | Good      | Good      | Pass   | ≤ 8 ms      |
| Carrier Sensing Function                                |           |     | Good      | Good      | Good      | Pass   | 100<br>mV/m |
| Interference Prevention Function                        |           |     | Good      |           |           | Pass   | -           |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                           |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|

## 4.1.3.2. Middle Channel

| Channel Number                  | ch.    | 40       |          |          | Result | Limit      |
|---------------------------------|--------|----------|----------|----------|--------|------------|
| Measurement Frequency           | MHz    | 5200     |          |          |        |            |
| Voltage                         | Vdc    | 10.80    | 12.00    | 13.20    | -      | -          |
| Frequency Measurements (Tx0)    | MHz    | 5 199.95 | 5 199.95 | 5 199.95 | -      | -          |
| Frequency Tolerance (Tx0)       | ppm    | -9.544   | -9.506   | -9.484   | Pass   | ± 20       |
| Frequency Measurements (Tx1)    | MHz    | 5 199.95 | 5 199.95 | 5 199.95 | -      | -          |
| Frequency Tolerance (Tx1)       | ppm    | -10.355  | -10.279  | -10.308  | Pass   | ± 20       |
| Frequency Measurements (Tx2)    | MHz    | 5 199.94 | 5 199.94 | 5 199.95 | -      | -          |
| Frequency Tolerance (Tx2)       | ppm    | -10.684  | -10.596  | -10.571  | Pass   | ± 20       |
| Frequency Measurements (Tx3)    | MHz    | 5 199.95 | 5 199.95 | 5 199.95 | -      | -          |
| Frequency Tolerance (Tx3)       | ppm    | -9.852   | -9.846   | -9.748   | Pass   | ± 20       |
| Occupied Bandwidth (Tx0)        | MHz    | 16.690   | 16.690   | 16.720   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx1)        | MHz    | 16.710   | 16.710   | 16.710   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx2)        | MHz    | 16.700   | 16.720   | 16.710   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx3)        | MHz    | 16.720   | 16.720   | 16.740   | Pass   | ≤ 20       |
| RF Output Power (Tx0)           | mW/MHz | 3.077    | 3.047    | 3.033    | Pass   | ≤ 10.0     |
| RF Output Power Tolerance (Tx0) | %      | -48.72   | -49.21   | -49.46   | Pass   | +20 to -80 |
| RF Output Power (Tx1)           | mW/MHz | 2.773    | 2.762    | 2.743    | Pass   | ≤ 10.0     |
| RF Output Power Tolerance (Tx0) | %      | -53.79   | -53.97   | -54.29   | Pass   | +20 to -80 |
| RF Output Power (Tx2)           | mW/MHz | 3.715    | 3.695    | 3.684    | Pass   | ≤ 10.0     |
| RF Output Power Tolerance (Tx0) | %      | -38.08   | -38.41   | -38.60   | Pass   | +20 to -80 |
| RF Output Power (Tx3)           | mW/MHz | 3.721    | 3.708    | 3.705    | Pass   | ≤ 10.0     |
| RF Output Power Tolerance (Tx0) | %      | -37.98   | -38.20   | -38.26   | Pass   | +20 to -80 |
| E.I.R.P. (Tx0)                  | mW/MHz | 4.876    | 4.830    | 4.806    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx1)                  | mW/MHz | 4.394    | 4.377    | 4.347    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx2)                  | mW/MHz | 5.888    | 5.857    | 5.839    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx3)                  | mW/MHz | 5.898    | 5.877    | 5.871    | Pass   | ≤ 10.0     |

F-TP22-06 (Rev.00)



G4B(www.g4b.go.kr)진위확인코드 : kegqWxQdI30=



# TEST REPORT



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Report No.:  
 SDCC-2020-00128  
 Page (23) / (135) pages

| Channel Number                                       |           | ch.    | 40        |           |           | Result | Limit |
|------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                |           | MHz    | 5200      |           |           |        |       |
| Voltage                                              |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength (Tx0) | 30 to     | uW/MHz | 0.040     | 0.084     | 0.035     | Pass   | ≤ 2.5 |
|                                                      | 5135 MHz  | MHz    | 5 135.00  | 831.49    | 5 124.79  | -      | -     |
|                                                      | 5365 to   | uW/MHz | 0.180     | 0.160     | 0.172     | Pass   | ≤ 2.5 |
|                                                      | 26000 MHz | MHz    | 23 668.25 | 24 906.35 | 24 926.98 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength (Tx1) | 30 to     | uW/MHz | 0.047     | 0.055     | 0.050     | Pass   | ≤ 2.5 |
|                                                      | 5135 MHz  | MHz    | 5 124.79  | 5 114.58  | 5 124.79  | -      | -     |
|                                                      | 5365 to   | uW/MHz | 0.157     | 0.164     | 0.157     | Pass   | ≤ 2.5 |
|                                                      | 26000 MHz | MHz    | 24 617.46 | 24 349.20 | 24 328.57 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength (Tx2) | 30 to     | uW/MHz | 0.074     | 0.068     | 0.074     | Pass   | ≤ 2.5 |
|                                                      | 5135 MHz  | MHz    | 5 124.79  | 5 124.79  | 5 124.79  | -      | -     |
|                                                      | 5365 to   | uW/MHz | 0.164     | 0.194     | 0.164     | Pass   | ≤ 2.5 |
|                                                      | 26000 MHz | MHz    | 24 349.20 | 24 266.66 | 24 988.89 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength (Tx3) | 30 to     | uW/MHz | 0.038     | 0.046     | 0.040     | Pass   | ≤ 2.5 |
|                                                      | 5135 MHz  | MHz    | 5 119.69  | 5 119.69  | 5 124.79  | -      | -     |
|                                                      | 5365 to   | uW/MHz | 0.174     | 0.172     | 0.156     | Pass   | ≤ 2.5 |
|                                                      | 26000 MHz | MHz    | 25 834.92 | 24 328.57 | 24 307.93 | -      | -     |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx0)        | cf        | dB     | 24.33     | 24.27     | 24.26     | -      | -     |
|                                                      | -20 MHz   | dB     | -31.58    | -31.53    | -31.69    | Pass   | ≤-25  |
|                                                      | 20 MHz    | dB     | -30.63    | -30.71    | -30.81    | Pass   | ≤-25  |
|                                                      | -40 MHz   | dB     | -50.88    | -51.03    | -51.07    | Pass   | ≤-40  |
|                                                      | 40 MHz    | dB     | -50.55    | -50.60    | -50.54    | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx1)        | cf        | dB     | 22.79     | 22.79     | 22.81     | -      | -     |
|                                                      | -20 MHz   | dB     | -33.53    | -33.49    | -33.50    | Pass   | ≤-25  |
|                                                      | 20 MHz    | dB     | -32.32    | -32.37    | -32.41    | Pass   | ≤-25  |
|                                                      | -40 MHz   | dB     | -52.31    | -52.29    | -52.34    | Pass   | ≤-40  |
|                                                      | 40 MHz    | dB     | -50.90    | -50.83    | -50.86    | Pass   | ≤-40  |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드 : keqzWxQdI30=



# TEST REPORT

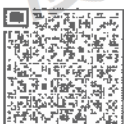


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Report No.:  
 SDCC-2020-00128  
 Page (24) / (135) pages

| Channel Number                       |            | ch.    | 40       |          |          | Result | Limit |
|--------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency                |            | MHz    | 5200     |          |          |        |       |
| Voltage                              |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Adjacent Channel Leakage Power (Tx2) | cf         | dB     | 20.99    | 20.99    | 20.99    | -      | -     |
|                                      | -20 MHz    | dB     | -34.56   | -34.59   | -34.60   | Pass   | ≤-25  |
|                                      | 20 MHz     | dB     | -33.87   | -33.83   | -33.87   | Pass   | ≤-25  |
|                                      | -40 MHz    | dB     | -52.32   | -52.36   | -52.34   | Pass   | ≤-40  |
|                                      | 40 MHz     | dB     | -50.81   | -50.85   | -50.88   | Pass   | ≤-40  |
| Adjacent Channel Leakage Power (Tx3) | cf         | dB     | 24.07    | 24.06    | 24.08    | -      | -     |
|                                      | -20 MHz    | dB     | -31.86   | -31.80   | -31.89   | Pass   | ≤-25  |
|                                      | 20 MHz     | dB     | -30.97   | -30.96   | -31.00   | Pass   | ≤-25  |
|                                      | -40 MHz    | dB     | -50.97   | -51.05   | -51.10   | Pass   | ≤-40  |
|                                      | 40 MHz     | dB     | -50.75   | -50.70   | -50.69   | Pass   | ≤-40  |
| Out-Band Leakage Power (Tx0)         | 5135.0 to  | uW/MHz | 0.023    | 0.020    | 0.021    | Pass   | -     |
|                                      | 5142.0 MHz | MHz    | 5 139.56 | 5 141.92 | 5 138.37 | -      | -     |
|                                      | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                      | 5142.0 to  | uW/MHz | 0.027    | 0.024    | 0.027    | Pass   | -     |
|                                      | 5150.0 MHz | MHz    | 5 142.06 | 5 144.69 | 5 142.55 | -      | -     |
|                                      | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                      | 5250.0 to  | uW/MHz | 0.041    | 0.035    | 0.034    | Pass   | -     |
|                                      | 5251.0 MHz | MHz    | 5 250.31 | 5 250.42 | 5 250.63 | -      | -     |
|                                      | Limit      | uW/MHz | 489.779  | 380.189  | 234.423  | -      | -     |
|                                      | 5251.0 to  | uW/MHz | 0.037    | 0.040    | 0.037    | Pass   | -     |
|                                      | 5260.0 MHz | MHz    | 5 256.67 | 5 256.97 | 5 257.27 | -      | -     |
|                                      | Limit      | uW/MHz | 31.333   | 29.467   | 27.712   | -      | -     |
|                                      | 5260.0 to  | uW/MHz | 0.038    | 0.036    | 0.035    | Pass   | -     |
|                                      | 5266.7 MHz | MHz    | 5 261.57 | 5 266.63 | 5 263.49 | -      | -     |
|                                      | Limit      | uW/MHz | 10.271   | 2.537    | 6.042    | -      | -     |
|                                      | 5266.7 to  | uW/MHz | 0.046    | 0.038    | 0.038    | Pass   | -     |
|                                      | 5365.0 MHz | MHz    | 5 274.37 | 5 275.06 | 5 274.37 | -      | -     |
|                                      | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드 : keqzWxQdI30=



# TEST REPORT



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Tel: +82-31-333-3220 Fax: +82-31-624-8855

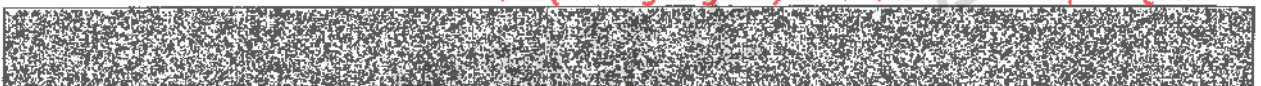
Report No.:  
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| Channel Number               |            | ch.    | 40       |          |          | Result | Limit |
|------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency        |            | MHz    | 5200     |          |          |        |       |
| Voltage                      |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band Leakage Power (Tx1) | 5135.0 to  | uW/MHz | 0.054    | 0.047    | 0.053    | Pass   | -     |
|                              | 5142.0 MHz | MHz    | 5 138.35 | 5 141.20 | 5 140.90 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                              | 5142.0 to  | uW/MHz | 0.060    | 0.064    | 0.062    | Pass   | -     |
|                              | 5150.0 MHz | MHz    | 5 147.72 | 5 147.26 | 5 143.83 | -      | -     |
|                              | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                              | 5250.0 to  | uW/MHz | 0.106    | 0.102    | 0.098    | Pass   | -     |
|                              | 5251.0 MHz | MHz    | 5 250.38 | 5 250.05 | 5 250.56 | -      | -     |
|                              | Limit      | uW/MHz | 416.869  | 891.251  | 275.423  | -      | -     |
|                              | 5251.0 to  | uW/MHz | 0.099    | 0.095    | 0.123    | Pass   | -     |
|                              | 5260.0 MHz | MHz    | 5 255.57 | 5 259.70 | 5 252.08 | -      | -     |
|                              | Limit      | uW/MHz | 39.244   | 16.853   | 80.168   | -      | -     |
|                              | 5260.0 to  | uW/MHz | 0.091    | 0.090    | 0.093    | Pass   | -     |
|                              | 5266.7 MHz | MHz    | 5 261.82 | 5 263.87 | 5 260.17 | -      | -     |
|                              | Limit      | uW/MHz | 9.585    | 5.440    | 15.122   | -      | -     |
|                              | 5266.7 to  | uW/MHz | 0.082    | 0.079    | 0.090    | Pass   | -     |
|                              | 5365.0 MHz | MHz    | 5 283.61 | 5 272.30 | 5 273.88 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: kegzWxOdI30=

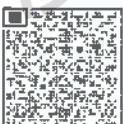


# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                           |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 40       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5200     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx2) | 5135.0 to  | uW/MHz | 0.073    | 0.073    | 0.080    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 136.78 | 5 140.22 | 5 141.33 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.087    | 0.100    | 0.089    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 143.61 | 5 149.90 | 5 149.66 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.116    | 0.101    | 0.127    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.96 | 5 250.77 | 5 250.88 | -      | -     |
|                                    | Limit      | uW/MHz | 109.648  | 169.824  | 131.826  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.110    | 0.105    | 0.108    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 252.70 | 5 257.07 | 5 255.67 | -      | -     |
|                                    | Limit      | uW/MHz | 70.614   | 28.870   | 38.449   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.094    | 0.111    | 0.106    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 265.30 | 5 260.35 | 5 264.12 | -      | -     |
|                                    | Limit      | uW/MHz | 3.664    | 14.388   | 5.077    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.094    | 0.092    | 0.083    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 277.61 | 5 272.01 | 5 274.86 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

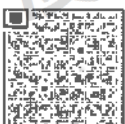


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| Channel Number               |            | ch.    | 40       |          |          | Result | Limit |
|------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency        |            | MHz    | 5200     |          |          |        |       |
| Voltage                      |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band Leakage Power (Tx3) | 5135.0 to  | uW/MHz | 0.035    | 0.040    | 0.030    | Pass   | -     |
|                              | 5142.0 MHz | MHz    | 5 141.14 | 5 141.43 | 5 138.39 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                              | 5142.0 to  | uW/MHz | 0.036    | 0.039    | 0.034    | Pass   | -     |
|                              | 5150.0 MHz | MHz    | 5 143.10 | 5 142.90 | 5 143.60 | -      | -     |
|                              | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                              | 5250.0 to  | uW/MHz | 0.060    | 0.059    | 0.061    | Pass   | -     |
|                              | 5251.0 MHz | MHz    | 5 250.72 | 5 250.06 | 5 250.08 | -      | -     |
|                              | Limit      | uW/MHz | 190.546  | 870.964  | 831.764  | -      | -     |
|                              | 5251.0 to  | uW/MHz | 0.071    | 0.089    | 0.079    | Pass   | -     |
|                              | 5260.0 MHz | MHz    | 5 255.98 | 5 257.55 | 5 257.53 | -      | -     |
|                              | Limit      | uW/MHz | 36.086   | 26.168   | 26.276   | -      | -     |
|                              | 5260.0 to  | uW/MHz | 0.061    | 0.064    | 0.056    | Pass   | -     |
|                              | 5266.7 MHz | MHz    | 5 261.96 | 5 260.40 | 5 262.74 | -      | -     |
|                              | Limit      | uW/MHz | 9.221    | 14.191   | 7.434    | -      | -     |
|                              | 5266.7 to  | uW/MHz | 0.070    | 0.064    | 0.070    | Pass   | -     |
|                              | 5365.0 MHz | MHz    | 5 286.65 | 5 279.68 | 5 273.19 | -      | -     |
| Limit                        | uW/MHz     | 2.500  | 2.500    | 2.500    | -        | -      |       |

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G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |  |
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|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (28) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|

| Channel Number                                          |           | ch. | 40        |           |           | Result | Limit    |
|---------------------------------------------------------|-----------|-----|-----------|-----------|-----------|--------|----------|
| Measurement Frequency                                   |           | MHz | 5200      |           |           |        |          |
| Voltage                                                 |           | Vdc | 10.80     | 12.00     | 13.20     | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx0) | 30 to     | nW  | 0.282     | 0.291     | 0.309     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 56.19     | 56.19     | 56.19     | -      | -        |
|                                                         | 1000 to   | nW  | 0.066     | 0.064     | 0.074     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 7 237.00  | 7 237.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.071     | 0.062     | 0.061     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 25 504.00 | 23 792.00 | 25 888.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx1) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 423.82    | 856.44    | 1 000.00  | -      | -        |
|                                                         | 1000 to   | nW  | 0.036     | 0.032     | 0.033     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.062     | 0.067     | 0.060     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 22 720.00 | 25 568.00 | 25 472.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx2) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 158.04    | 956.35    | 813.76    | -      | -        |
|                                                         | 1000 to   | nW  | 0.032     | 0.032     | 0.030     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.058     | 0.056     | 0.065     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 24 432.00 | 23 984.00 | 24 064.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx3) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 987.39    | 792.42    | 903.97    | -      | -        |
|                                                         | 1000 to   | nW  | 0.016     | 0.017     | 0.014     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 673.00  | 5 878.00  | 6 634.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.064     | 0.077     | 0.062     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 23 808.00 | 24 048.00 | 22 128.00 | -      | -        |
| Burst Length of Transmitted Signals                     |           |     | Good      | Good      | Good      | Pass   | ≤ 8 ms   |
| Carrier Sensing Function                                |           |     | Good      | Good      | Good      | Pass   | 100 mV/m |
| Interference Prevention Function                        |           |     | Good      |           |           | Pass   | -        |

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G4B(www.g4b.go.kr)진위확인코드 : keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                             |                                                                    |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>#708, Creation Hall, Yongin Songdam College, 61<br/>Dongbu-ro, Cheoln, Yongin, Gyeonggi-do, 17145,<br/>Korea<br/>Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/>SDCC-2020-00128<br/>Page (29) / (135) pages</p> |  |
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## 4.1.3.3. Highest Channel

| Channel Number                                       |           | ch.    | 48        |           |           | Result | Limit      |
|------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|------------|
| Measurement Frequency                                |           | MHz    | 5240      |           |           |        |            |
| Voltage                                              |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -          |
| Frequency Measurements (Tx0)                         |           | MHz    | 5 239.95  | 5 239.95  | 5 239.95  | -      | -          |
| Frequency Tolerance (Tx0)                            |           | ppm    | -9.683    | -9.629    | -9.524    | Pass   | ± 20       |
| Frequency Measurements (Tx1)                         |           | MHz    | 5 239.94  | 5 239.94  | 5 239.94  | -      | -          |
| Frequency Tolerance (Tx1)                            |           | ppm    | -10.790   | -10.589   | -10.573   | Pass   | ± 20       |
| Frequency Measurements (Tx2)                         |           | MHz    | 5 239.94  | 5 239.94  | 5 239.94  | -      | -          |
| Frequency Tolerance (Tx2)                            |           | ppm    | -10.715   | -10.724   | -10.642   | Pass   | ± 20       |
| Frequency Measurements (Tx3)                         |           | MHz    | 5 239.95  | 5 239.95  | 5 239.95  | -      | -          |
| Frequency Tolerance (Tx3)                            |           | ppm    | -9.971    | -9.935    | -9.871    | Pass   | ± 20       |
| Occupied Bandwidth (Tx0)                             |           | MHz    | 17.870    | 17.590    | 17.830    | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx1)                             |           | MHz    | 17.010    | 17.000    | 16.980    | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx2)                             |           | MHz    | 17.160    | 17.110    | 17.080    | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx3)                             |           | MHz    | 17.090    | 17.110    | 17.090    | Pass   | ≤ 20       |
| RF Output Power (Tx0)                                |           | mW/MHz | 6.006     | 5.943     | 5.891     | Pass   | ≤ 10.0     |
| RF Output Power Tolerance (Tx0)                      |           | %      | 0.09      | -0.95     | -1.82     | Pass   | +20 to -80 |
| RF Output Power (Tx1)                                |           | mW/MHz | 5.551     | 5.548     | 5.544     | Pass   | ≤ 10.0     |
| RF Output Power Tolerance (Tx0)                      |           | %      | -7.48     | -7.53     | -7.60     | Pass   | +20 to -80 |
| RF Output Power (Tx2)                                |           | mW/MHz | 6.021     | 5.973     | 5.938     | Pass   | ≤ 10.0     |
| RF Output Power Tolerance (Tx0)                      |           | %      | 0.35      | -0.45     | -1.03     | Pass   | +20 to -80 |
| RF Output Power (Tx3)                                |           | mW/MHz | 6.287     | 6.274     | 6.263     | Pass   | ≤ 10.0     |
| RF Output Power Tolerance (Tx0)                      |           | %      | 4.78      | 4.57      | 4.38      | Pass   | +20 to -80 |
| E.I.R.P. (Tx0)                                       |           | mW/MHz | 9.518     | 9.419     | 9.336     | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx1)                                       |           | mW/MHz | 8.798     | 8.793     | 8.787     | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx2)                                       |           | mW/MHz | 9.543     | 9.466     | 9.411     | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx3)                                       |           | mW/MHz | 9.964     | 9.944     | 9.925     | Pass   | ≤ 10.0     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength (Tx0) | 30 to     | uW/MHz | 0.039     | 0.032     | 0.039     | Pass   | ≤ 2.5      |
|                                                      | 5135 MHz  | MHz    | 5 078.85  | 5 083.95  | 5 129.90  | -      | -          |
|                                                      | 5365 to   | uW/MHz | 0.185     | 0.171     | 0.183     | Pass   | ≤ 2.5      |
|                                                      | 26000 MHz | MHz    | 24 328.57 | 24 307.93 | 23 977.77 | -      | -          |

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G4B(www.g4b.go.kr)진위확인코드 : keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                            |                                                                  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|
|  <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61 Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145, Korea<br>Tel: +82-31-333-3220 Fax: +82-31-824-8855 | Report No.:<br><b>SDCC-2020-00128</b><br>Page (30) / (135) pages |
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| Channel Number                                       |           | ch.    | 48        |           |           | Result | Limit |
|------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                |           | MHz    | 5240      |           |           |        |       |
| Voltage                                              |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength (Tx1) | 30 to     | uW/MHz | 0.063     | 0.050     | 0.066     | Pass   | ≤ 2.5 |
|                                                      | 5135 MHz  | MHz    | 5 089.06  | 5 083.95  | 5 083.95  | -      | -     |
|                                                      | 5365 to   | uW/MHz | 0.179     | 0.176     | 0.162     | Pass   | ≤ 2.5 |
|                                                      | 26000 MHz | MHz    | 24 617.46 | 24 349.20 | 24 246.03 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength (Tx2) | 30 to     | uW/MHz | 0.278     | 0.068     | 0.051     | Pass   | ≤ 2.5 |
|                                                      | 5135 MHz  | MHz    | 831.49    | 5 083.95  | 5 073.74  | -      | -     |
|                                                      | 5365 to   | uW/MHz | 0.187     | 0.164     | 0.186     | Pass   | ≤ 2.5 |
|                                                      | 26000 MHz | MHz    | 24 988.89 | 24 369.84 | 24 617.46 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength (Tx3) | 30 to     | uW/MHz | 0.046     | 0.042     | 0.045     | Pass   | ≤ 2.5 |
|                                                      | 5135 MHz  | MHz    | 5 083.95  | 5 083.95  | 5 089.06  | -      | -     |
|                                                      | 5365 to   | uW/MHz | 0.220     | 0.192     | 0.196     | Pass   | ≤ 2.5 |
|                                                      | 26000 MHz | MHz    | 23 957.14 | 23 647.61 | 24 638.09 | -      | -     |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx0)        | cf        | dB     | 26.58     | 26.55     | 26.53     | -      | -     |
|                                                      | -20 MHz   | dB     | -26.09    | -26.13    | -26.16    | Pass   | ≤-25  |
|                                                      | 20 MHz    | dB     | -25.53    | -25.57    | -25.62    | Pass   | ≤-25  |
|                                                      | -40 MHz   | dB     | -47.61    | -47.56    | -47.61    | Pass   | ≤-40  |
|                                                      | 40 MHz    | dB     | -47.50    | -47.59    | -47.54    | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx1)        | cf        | dB     | 25.91     | 25.85     | 25.84     | -      | -     |
|                                                      | -20 MHz   | dB     | -26.95    | -26.90    | -26.95    | Pass   | ≤-25  |
|                                                      | 20 MHz    | dB     | -26.15    | -26.24    | -26.22    | Pass   | ≤-25  |
|                                                      | -40 MHz   | dB     | -47.98    | -47.80    | -47.71    | Pass   | ≤-40  |
|                                                      | 40 MHz    | dB     | -47.61    | -47.51    | -47.40    | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx2)        | cf        | dB     | 26.45     | 26.45     | 26.45     | -      | -     |
|                                                      | -20 MHz   | dB     | -26.52    | -26.55    | -26.58    | Pass   | ≤-25  |
|                                                      | 20 MHz    | dB     | -25.56    | -25.56    | -25.63    | Pass   | ≤-25  |
|                                                      | -40 MHz   | dB     | -47.83    | -47.75    | -47.76    | Pass   | ≤-40  |
|                                                      | 40 MHz    | dB     | -46.94    | -46.92    | -46.87    | Pass   | ≤-40  |

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G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드 : keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (31) / (135) pages</p> |  |
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| Channel Number                       |            | ch.    | 48       |          |          | Result | Limit |
|--------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency                |            | MHz    | 5240     |          |          |        |       |
| Voltage                              |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Adjacent Channel Leakage Power (Tx3) | cf         | dB     | 26.37    | 26.38    | 26.38    | -      | -     |
|                                      | -20 MHz    | dB     | -26.32   | -26.44   | -26.43   | Pass   | ≤-25  |
|                                      | 20 MHz     | dB     | -25.75   | -25.83   | -25.79   | Pass   | ≤-25  |
|                                      | -40 MHz    | dB     | -47.76   | -47.80   | -47.87   | Pass   | ≤-40  |
|                                      | 40 MHz     | dB     | -47.70   | -47.63   | -47.69   | Pass   | ≤-40  |
| Out-Band Leakage Power (Tx0)         | 5135.0 to  | uW/MHz | 0.040    | 0.038    | 0.034    | Pass   | -     |
|                                      | 5142.0 MHz | MHz    | 5 135.27 | 5 141.26 | 5 141.48 | -      | -     |
|                                      | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                      | 5142.0 to  | uW/MHz | 0.049    | 0.040    | 0.041    | Pass   | -     |
|                                      | 5150.0 MHz | MHz    | 5 148.34 | 5 149.09 | 5 147.46 | -      | -     |
|                                      | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                      | 5250.0 to  | uW/MHz | 0.415    | 0.391    | 0.326    | Pass   | -     |
|                                      | 5251.0 MHz | MHz    | 5 250.04 | 5 250.06 | 5 250.13 | -      | -     |
|                                      | Limit      | uW/MHz | 912.011  | 870.964  | 741.310  | -      | -     |
|                                      | 5251.0 to  | uW/MHz | 0.177    | 0.129    | 0.162    | Pass   | -     |
|                                      | 5260.0 MHz | MHz    | 5 251.03 | 5 251.01 | 5 251.07 | -      | -     |
|                                      | Limit      | uW/MHz | 99.388   | 99.796   | 98.577   | -      | -     |
|                                      | 5260.0 to  | uW/MHz | 0.019    | 0.086    | 0.083    | Pass   | -     |
|                                      | 5266.7 MHz | MHz    | 5 260.02 | 5 260.09 | 5 260.01 | -      | -     |
|                                      | Limit      | uW/MHz | 15.762   | 15.460   | 15.805   | -      | -     |
|                                      | 5266.7 to  | uW/MHz | 0.098    | 0.100    | 0.124    | Pass   | -     |
|                                      | 5365.0 MHz | MHz    | 5 266.70 | 5 269.55 | 5 269.35 | -      | -     |
|                                      | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                      |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-6655</p> | <p>Report No.:<br/>         SDCC-2020-00128<br/>         Page (32) / (135) pages</p> |  |
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| Channel Number                     |            | ch.    | 48       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5240     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx1) | 5135.0 to  | uW/MHz | 0.058    | 0.052    | 0.056    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 141.92 | 5 139.94 | 5 141.63 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.078    | 0.085    | 0.077    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 147.74 | 5 147.83 | 5 149.56 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 2.811    | 2.198    | 1.976    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.07 | 5 250.27 | 5 250.07 | -      | -     |
|                                    | Limit      | uW/MHz | 851.138  | 537.032  | 851.138  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 1.214    | 1.112    | 1.166    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 251.07 | 5 251.06 | 5 251.05 | -      | -     |
|                                    | Limit      | uW/MHz | 98.577   | 98.779   | 98.982   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.127    | 0.128    | 0.115    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 260.19 | 5 260.03 | 5 260.11 | -      | -     |
|                                    | Limit      | uW/MHz | 15.038   | 15.718   | 15.374   | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.159    | 0.144    | 0.156    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 267.09 | 5 267.29 | 5 267.19 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=

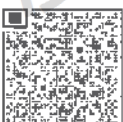


# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                   |                                                                                      |  |
|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongsin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongsin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-824-8855</p> | <p>Report No.:<br/>         SDCC-2020-00128<br/>         Page (33) / (135) pages</p> |  |
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| Channel Number               |            | ch.    | 48       |          |          | Result | Limit |
|------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency        |            | MHz    | 5240     |          |          |        |       |
| Voltage                      |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band Leakage Power (Tx2) | 5135.0 to  | uW/MHz | 0.060    | 0.070    | 0.074    | Pass   | -     |
|                              | 5142.0 MHz | MHz    | 5 139.48 | 5 138.49 | 5 140.61 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                              | 5142.0 to  | uW/MHz | 0.077    | 0.077    | 0.078    | Pass   | -     |
|                              | 5150.0 MHz | MHz    | 5 148.75 | 5 149.15 | 5 146.02 | -      | -     |
|                              | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                              | 5250.0 to  | uW/MHz | 2.472    | 1.948    | 2.278    | Pass   | -     |
|                              | 5251.0 MHz | MHz    | 5 250.09 | 5 250.46 | 5 250.12 | -      | -     |
|                              | Limit      | uW/MHz | 812.831  | 346.737  | 758.578  | -      | -     |
|                              | 5251.0 to  | uW/MHz | 1.256    | 1.111    | 1.163    | Pass   | -     |
|                              | 5260.0 MHz | MHz    | 5 251.24 | 5 251.19 | 5 251.07 | -      | -     |
|                              | Limit      | uW/MHz | 95.207   | 96.186   | 98.577   | -      | -     |
|                              | 5260.0 to  | uW/MHz | 0.148    | 0.130    | 0.155    | Pass   | -     |
|                              | 5266.7 MHz | MHz    | 5 260.01 | 5 260.25 | 5 260.11 | -      | -     |
|                              | Limit      | uW/MHz | 15.805   | 14.791   | 15.374   | -      | -     |
|                              | 5266.7 to  | uW/MHz | 0.108    | 0.095    | 0.117    | Pass   | -     |
|                              | 5365.0 MHz | MHz    | 5 267.39 | 5 266.70 | 5 267.58 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

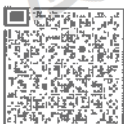


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| Channel Number                     |            | ch.    | 48       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5240     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx3) | 5135.0 to  | uW/MHz | 0.035    | 0.039    | 0.040    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 139.91 | 5 140.36 | 5 141.34 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.050    | 0.045    | 0.045    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 147.62 | 5 145.74 | 5 146.32 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.178    | 0.229    | 0.422    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.03 | 5 250.06 | 5 250.05 | -      | -     |
|                                    | Limit      | uW/MHz | 933.254  | 870.964  | 891.251  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.053    | 0.108    | 0.092    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 251.70 | 5 251.04 | 5 251.29 | -      | -     |
|                                    | Limit      | uW/MHz | 86.652   | 99.185   | 94.237   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.060    | 0.037    | 0.061    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 260.17 | 5 260.20 | 5 260.26 | -      | -     |
|                                    | Limit      | uW/MHz | 15.122   | 14.997   | 14.750   | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.089    | 0.111    | 0.088    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 266.80 | 5 266.70 | 5 266.80 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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| Channel Number                              |           | ch. | 48        |           |           | Result | Limit    |
|---------------------------------------------|-----------|-----|-----------|-----------|-----------|--------|----------|
| Measurement Frequency                       |           | MHz | 5240      |           |           |        |          |
| Voltage                                     |           | Vdc | 10.80     | 12.00     | 13.20     | -      | -        |
| Secondary emitted radio wave strength (Tx0) | 30 to     | nW  | 0.280     | 0.288     | 0.340     | Pass   | ≤ 4      |
|                                             | 1000 MHz  | MHz | 56.19     | 57.16     | 56.19     | -      | -        |
|                                             | 1000 to   | nW  | 0.061     | 0.064     | 0.065     | Pass   | ≤ 20     |
|                                             | 10000 MHz | MHz | 3 619.00  | 7 237.00  | 3 619.00  | -      | -        |
|                                             | 10000 to  | nW  | 0.066     | 0.068     | 0.065     | Pass   | ≤ 20     |
|                                             | 26000 MHz | MHz | 23 408.00 | 23 824.00 | 25 856.00 | -      | -        |
| Secondary emitted radio wave strength (Tx1) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                             | 1000 MHz  | MHz | 1 000.00  | 1 000.00  | 1 000.00  | -      | -        |
|                                             | 1000 to   | nW  | 0.031     | 0.035     | 0.037     | Pass   | ≤ 20     |
|                                             | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                             | 10000 to  | nW  | 0.063     | 0.054     | 0.099     | Pass   | ≤ 20     |
|                                             | 26000 MHz | MHz | 25 968.00 | 25 776.00 | 25 824.00 | -      | -        |
| Secondary emitted radio wave strength (Tx2) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                             | 1000 MHz  | MHz | 836.07    | 961.20    | 848.68    | -      | -        |
|                                             | 1000 to   | nW  | 0.027     | 0.031     | 0.031     | Pass   | ≤ 20     |
|                                             | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                             | 10000 to  | nW  | 0.061     | 0.064     | 0.087     | Pass   | ≤ 20     |
|                                             | 26000 MHz | MHz | 23 504.00 | 25 696.00 | 24 080.00 | -      | -        |
| Secondary emitted radio wave strength (Tx3) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                             | 1000 MHz  | MHz | 806.97    | 740.04    | 852.56    | -      | -        |
|                                             | 1000 to   | nW  | 0.016     | 0.015     | 0.016     | Pass   | ≤ 20     |
|                                             | 10000 MHz | MHz | 3 691.00  | 3 709.00  | 3 709.00  | -      | -        |
|                                             | 10000 to  | nW  | 0.079     | 0.080     | 0.076     | Pass   | ≤ 20     |
|                                             | 26000 MHz | MHz | 25 984.00 | 24 016.00 | 25 280.00 | -      | -        |
| Burst Length of Transmitted Signals         |           |     | Good      | Good      | Good      | Pass   | ≤ 8 ms   |
| Carrier Sensing Function                    |           |     | Good      | Good      | Good      | Pass   | 100 mV/m |
| Interference Prevention Function            |           |     | Good      |           |           | Pass   | -        |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                             |                                                                    |  |
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|

## 4.2. 802.11n (HT20)

### 4.2.1. Duty cycle

|            |          |       |    |
|------------|----------|-------|----|
| Duty Cycle | On       | 0.229 | ms |
|            | Off      | 0.023 | ms |
|            | On + Off | 0.251 | ms |
|            | Ratio    | 90.9  | %  |

### 4.2.2. Declaration RF Output Power

|                       |       |         |
|-----------------------|-------|---------|
| Declaration RF Output | 4     | mW/MHz  |
| Power                 | 6.021 | dBm/MHz |
| E.I.R.P.              | 9.042 | mW/MHz  |
|                       | 8.021 | dBm/MHz |

### 4.2.3. Test Result

#### 4.2.3.1. Lowest Channel

| Channel Number               | ch. | 36       |          |          | Result | Limit |
|------------------------------|-----|----------|----------|----------|--------|-------|
| Measurement Frequency        | MHz | 5180     |          |          |        |       |
| Voltage                      | Vdc | 10.80    | 12.00    | 13.20    | -      | -     |
| Frequency Measurements (Tx0) | MHz | 5 179.94 | 5 179.94 | 5 179.94 | -      | -     |
| Frequency Tolerance (Tx0)    | ppm | -10.728  | -11.103  | -11.128  | Pass   | ± 20  |
| Frequency Measurements (Tx1) | MHz | 5 179.94 | 5 179.94 | 5 179.94 | -      | -     |
| Frequency Tolerance (Tx1)    | ppm | -11.500  | -11.463  | -11.409  | Pass   | ± 20  |
| Frequency Measurements (Tx2) | MHz | 5 179.94 | 5 179.94 | 5 179.94 | -      | -     |
| Frequency Tolerance (Tx2)    | ppm | -11.388  | -11.348  | -11.295  | Pass   | ± 20  |
| Frequency Measurements (Tx3) | MHz | 5 179.94 | 5 179.96 | 5 179.94 | -      | -     |
| Frequency Tolerance (Tx3)    | ppm | -11.233  | -7.677   | -11.198  | Pass   | ± 20  |



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|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |  |
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|

| Channel Number            | ch.    | 36     |        |        | Result | Limit      |
|---------------------------|--------|--------|--------|--------|--------|------------|
| Measurement Frequency     | MHz    | 5180   |        |        |        |            |
| Voltage                   | Vdc    | 10.80  | 12.00  | 13.20  | -      | -          |
| Occupied Bandwidth (Tx0)  | MHz    | 17.930 | 17.940 | 18.020 | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx1)  | MHz    | 17.880 | 17.910 | 17.910 | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx2)  | MHz    | 17.960 | 17.910 | 17.900 | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx3)  | MHz    | 17.980 | 17.910 | 17.910 | Pass   | ≤ 20       |
| RF Output Power (Tx0)     | mW/MHz | 1.019  | 0.978  | 0.950  | Pass   | ≤ 10.0     |
| RF Output Power (Tx1)     | mW/MHz | 1.070  | 1.035  | 1.015  | Pass   | ≤ 10.0     |
| RF Output Power (Tx2)     | mW/MHz | 1.012  | 0.940  | 0.952  | Pass   | ≤ 10.0     |
| RF Output Power (Tx3)     | mW/MHz | 1.342  | 1.322  | 1.306  | Pass   | ≤ 10.0     |
| RF Output Power (Sum)     | mW/MHz | 4.444  | 4.275  | 4.224  | Pass   | ≤ 10.0     |
| RF Output Power Tolerance | %      | 11.09  | 6.87   | 5.59   | Pass   | +20 to -80 |
| E.I.R.P. (Tx0)            | mW/MHz | 1.615  | 1.550  | 1.506  | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx1)            | mW/MHz | 1.696  | 1.640  | 1.609  | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx2)            | mW/MHz | 1.604  | 1.489  | 1.509  | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx3)            | mW/MHz | 2.127  | 2.096  | 2.071  | Pass   | ≤ 10.0     |
| E.I.R.P. (Sum)            | mW/MHz | 7.043  | 6.775  | 6.694  | Pass   | ≤ 10.0     |

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| Channel Number                                          |           | ch.    | 36        |           |           | Result | Limit |
|---------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |           | MHz    | 5180      |           |           |        |       |
| Voltage                                                 |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx0) | 30 to     | uW/MHz | 0.024     | 0.024     | 0.023     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 2 403.83  | 5 099.27  | 5 124.79  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.170     | 0.171     | 0.200     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 307.93 | 24 307.93 | 24 968.25 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx1) | 30 to     | uW/MHz | 0.045     | 0.055     | 0.138     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 831.49    | 831.49    | 831.49    | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.181     | 0.166     | 0.165     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 307.93 | 23 977.77 | 24 246.03 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx2) | 30 to     | uW/MHz | 0.026     | 0.134     | 0.026     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 5 135.00  | 831.49    | 5 124.79  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.177     | 0.167     | 0.198     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 988.89 | 24 266.66 | 24 369.84 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx3) | 30 to     | uW/MHz | 0.028     | 0.029     | 0.035     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 5 135.00  | 5 135.00  | 5 135.00  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.164     | 0.203     | 0.171     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 266.66 | 24 369.84 | 24 452.38 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Sum) | 30 to     | uW/MHz | 0.124     | 0.241     | 0.221     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | -         | -         | -         | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.692     | 0.707     | 0.734     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | -         | -         | -         | -      | -     |

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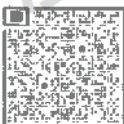


# TEST REPORT

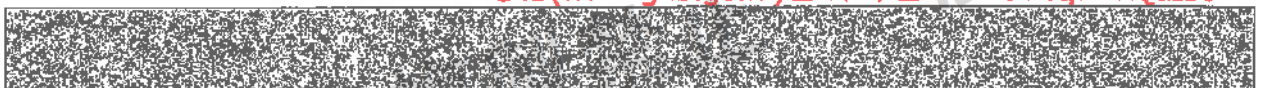
|                                                                                                                                                                                                                                                                            |                                                           |
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|

| Channel Number                       |         | ch. | 36     |        |        | Result | Limit |
|--------------------------------------|---------|-----|--------|--------|--------|--------|-------|
| Measurement Frequency                |         | MHz | 5180   |        |        |        |       |
| Voltage                              |         | Vdc | 10.80  | 12.00  | 13.20  | -      | -     |
| Adjacent Channel Leakage Power (Tx0) | cf      | dB  | 19.56  | 19.44  | 19.46  | -      | -     |
|                                      | -20 MHz | dB  | -31.37 | -30.98 | -31.27 | Pass   | ≤-25  |
|                                      | 20 MHz  | dB  | -31.26 | -31.94 | -31.52 | Pass   | ≤-25  |
|                                      | -40 MHz | dB  | -52.68 | -52.70 | -52.65 | Pass   | ≤-40  |
|                                      | 40 MHz  | dB  | -52.10 | -52.07 | -52.07 | Pass   | ≤-40  |
| Adjacent Channel Leakage Power (Tx1) | cf      | dB  | 20.04  | 20.01  | 20.06  | -      | -     |
|                                      | -20 MHz | dB  | -32.58 | -32.06 | -32.15 | Pass   | ≤-25  |
|                                      | 20 MHz  | dB  | -31.50 | -31.19 | -31.28 | Pass   | ≤-25  |
|                                      | -40 MHz | dB  | -53.13 | -53.05 | -53.08 | Pass   | ≤-40  |
|                                      | 40 MHz  | dB  | -52.58 | -52.55 | -52.59 | Pass   | ≤-40  |
| Adjacent Channel Leakage Power (Tx2) | cf      | dB  | 19.94  | 19.90  | 19.87  | -      | -     |
|                                      | -20 MHz | dB  | -31.69 | -32.00 | -31.88 | Pass   | ≤-25  |
|                                      | 20 MHz  | dB  | -31.14 | -31.47 | -31.17 | Pass   | ≤-25  |
|                                      | -40 MHz | dB  | -53.16 | -53.18 | -53.19 | Pass   | ≤-40  |
|                                      | 40 MHz  | dB  | -52.40 | -52.31 | -52.37 | Pass   | ≤-40  |
| Adjacent Channel Leakage Power (Tx3) | cf      | dB  | 21.00  | 20.99  | 20.89  | -      | -     |
|                                      | -20 MHz | dB  | -31.88 | -32.03 | -32.06 | Pass   | ≤-25  |
|                                      | 20 MHz  | dB  | -31.41 | -31.65 | -31.99 | Pass   | ≤-25  |
|                                      | -40 MHz | dB  | -52.81 | -52.80 | -52.75 | Pass   | ≤-40  |
|                                      | 40 MHz  | dB  | -52.41 | -52.48 | -52.47 | Pass   | ≤-40  |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                             |                                                                    |  |
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 36       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5180     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx0) | 5135.0 to  | uW/MHz | 0.053    | 0.029    | 0.014    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 141.60 | 5 139.19 | 5 136.79 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.076    | 0.039    | 0.078    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 145.94 | 5 149.14 | 5 148.74 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.014    | 0.021    | 0.017    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.61 | 5 250.46 | 5 250.37 | -      | -     |
|                                    | Limit      | uW/MHz | 245.471  | 346.737  | 426.580  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.023    | 0.018    | 0.016    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 253.31 | 5 255.32 | 5 256.00 | -      | -     |
|                                    | Limit      | uW/MHz | 62.326   | 41.305   | 35.938   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.013    | 0.019    | 0.017    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 263.53 | 5 266.17 | 5 262.67 | -      | -     |
|                                    | Limit      | uW/MHz | 5.976    | 2.881    | 7.579    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.015    | 0.016    | 0.012    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 267.09 | 5 267.68 | 5 267.78 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |  |
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|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Chacin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-824-8855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (41) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|

| Channel Number               |            | ch.    | 36       |          |          | Result | Limit |
|------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency        |            | MHz    | 5180     |          |          |        |       |
| Voltage                      |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band Leakage Power (Tx1) | 5135.0 to  | uW/MHz | 0.031    | 0.033    | 0.028    | Pass   | -     |
|                              | 5142.0 MHz | MHz    | 5 140.40 | 5 137.61 | 5 141.56 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                              | 5142.0 to  | uW/MHz | 0.033    | 0.030    | 0.117    | Pass   | -     |
|                              | 5150.0 MHz | MHz    | 5 144.42 | 5 148.80 | 5 149.28 | -      | -     |
|                              | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                              | 5250.0 to  | uW/MHz | 0.024    | 0.026    | 0.023    | Pass   | -     |
|                              | 5251.0 MHz | MHz    | 5 250.74 | 5 250.31 | 5 250.88 | -      | -     |
|                              | Limit      | uW/MHz | 181.970  | 489.779  | 131.826  | -      | -     |
|                              | 5251.0 to  | uW/MHz | 0.024    | 0.025    | 0.027    | Pass   | -     |
|                              | 5260.0 MHz | MHz    | 5 252.56 | 5 253.59 | 5 259.05 | -      | -     |
|                              | Limit      | uW/MHz | 72.666   | 58.854   | 19.251   | -      | -     |
|                              | 5260.0 to  | uW/MHz | 0.026    | 0.022    | 0.023    | Pass   | -     |
|                              | 5266.7 MHz | MHz    | 5 263.20 | 5 262.88 | 5 260.82 | -      | -     |
|                              | Limit      | uW/MHz | 6.546    | 7.152    | 12.636   | -      | -     |
|                              | 5266.7 to  | uW/MHz | 0.017    | 0.017    | 0.018    | Pass   | -     |
|                              | 5365.0 MHz | MHz    | 5 267.88 | 5 267.49 | 5 266.80 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

|                                                                                   |                                                                                                                                                                                                |                                                           |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|
|  | <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-824-8855 | Report No.:<br>SDCC-2020-00128<br>Page (42) / (135) pages |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 36       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5180     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx2) | 5135.0 to  | uW/MHz | 0.025    | 0.026    | 0.027    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 139.14 | 5 141.32 | 5 137.95 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.035    | 0.033    | 0.037    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 146.50 | 5 149.30 | 5 149.30 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.029    | 0.029    | 0.029    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.43 | 5 250.40 | 5 250.99 | -      | -     |
|                                    | Limit      | uW/MHz | 371.535  | 398.107  | 102.329  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.031    | 0.027    | 0.032    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 259.33 | 5 255.24 | 5 251.41 | -      | -     |
|                                    | Limit      | uW/MHz | 18.178   | 41.987   | 91.951   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.033    | 0.033    | 0.027    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 264.17 | 5 262.59 | 5 262.27 | -      | -     |
|                                    | Limit      | uW/MHz | 5.007    | 7.748    | 8.464    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.021    | 0.025    | 0.024    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 267.39 | 5 269.26 | 5 266.70 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (43) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 36       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5180     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx3) | 5135.0 to  | uW/MHz | 0.029    | 0.032    | 0.029    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 139.92 | 5 141.08 | 5 138.42 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.055    | 0.043    | 0.039    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 144.30 | 5 149.27 | 5 149.30 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.030    | 0.030    | 0.029    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.85 | 5 250.07 | 5 250.69 | -      | -     |
|                                    | Limit      | uW/MHz | 141.254  | 851.138  | 204.174  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.034    | 0.029    | 0.031    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 252.17 | 5 256.42 | 5 256.02 | -      | -     |
|                                    | Limit      | uW/MHz | 78.705   | 32.978   | 35.791   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.024    | 0.029    | 0.028    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 264.56 | 5 266.11 | 5 260.56 | -      | -     |
|                                    | Limit      | uW/MHz | 4.496    | 2.930    | 13.577   | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.018    | 0.021    | 0.021    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 266.80 | 5 268.57 | 5 268.37 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT



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 #708, Creation Hall, Yongin Songdam College, 61  
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| Channel Number                                          |            | ch.    | 36        |           |           | Result | Limit |
|---------------------------------------------------------|------------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |            | MHz    | 5180      |           |           |        |       |
| Voltage                                                 |            | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Out-Band<br>Leakage<br>Power<br>(Sum)                   | 5135.0 to  | uW/MHz | 0.139     | 0.120     | 0.098     | Pass   | -     |
|                                                         | 5142.0 MHz | MHz    | 5141.60   | 5141.32   | 5141.56   | -      | -     |
|                                                         | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
|                                                         | 5142.0 to  | uW/MHz | 0.198     | 0.145     | 0.271     | Pass   | -     |
|                                                         | 5150.0 MHz | MHz    | 5146.50   | 5149.30   | 5149.30   | -      | -     |
|                                                         | Limit      | uW/MHz | 15.000    | 15.000    | 15.000    | -      | -     |
|                                                         | 5250.0 to  | uW/MHz | 0.097     | 0.106     | 0.098     | Pass   | -     |
|                                                         | 5251.0 MHz | MHz    | 5250.85   | 5250.46   | 5250.99   | -      | -     |
|                                                         | Limit      | uW/MHz | 141.254   | 346.737   | 102.329   | -      | -     |
|                                                         | 5251.0 to  | uW/MHz | 0.112     | 0.099     | 0.106     | Pass   | -     |
|                                                         | 5260.0 MHz | MHz    | 5259.33   | 5256.42   | 5259.05   | -      | -     |
|                                                         | Limit      | uW/MHz | 18.178    | 32.978    | 19.251    | -      | -     |
|                                                         | 5260.0 to  | uW/MHz | 0.096     | 0.103     | 0.095     | Pass   | -     |
|                                                         | 5266.7 MHz | MHz    | 5264.56   | 5266.17   | 5262.67   | -      | -     |
|                                                         | Limit      | uW/MHz | 4.496     | 2.881     | 7.579     | -      | -     |
|                                                         | 5266.7 to  | uW/MHz | 0.071     | 0.078     | 0.075     | Pass   | -     |
|                                                         | 5365.0 MHz | MHz    | 5267.88   | 5269.26   | 5268.37   | -      | -     |
|                                                         | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx0) | 30 to      | nW     | 0.335     | 0.272     | 0.284     | Pass   | ≤ 4   |
|                                                         | 1000 MHz   | MHz    | 56.19     | 57.16     | 57.16     | -      | -     |
|                                                         | 1000 to    | nW     | 0.061     | 0.065     | 0.065     | Pass   | ≤ 20  |
|                                                         | 10000 MHz  | MHz    | 7 237.00  | 7 237.00  | 7 237.00  | -      | -     |
|                                                         | 10000 to   | nW     | 0.603     | 0.633     | 0.898     | Pass   | ≤ 20  |
|                                                         | 12500 MHz  | MHz    | 25 808.00 | 24 000.00 | 25 600.00 | -      | -     |

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# TEST REPORT



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 Tel: +82-31-333-3220 Fax: +82-31-624-8855

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|                                                         |           |     |           |           |           |        |          |
|---------------------------------------------------------|-----------|-----|-----------|-----------|-----------|--------|----------|
| Channel Number                                          |           | ch. | 36        |           |           | Result | Limit    |
| Measurement Frequency                                   |           | MHz | 5180      |           |           |        |          |
| Voltage                                                 |           | Vdc | 10.80     | 12.00     | 13.20     | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx1) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 103.72    | 973.81    | 736.16    | -      | -        |
|                                                         | 1000 to   | nW  | 0.030     | 0.033     | 0.030     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.851     | 0.726     | 0.490     | Pass   | ≤ 20     |
|                                                         | 12500 MHz | MHz | 25 248.00 | 25 808.00 | 25 744.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx2) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 100.81    | 65.89     | 158.04    | -      | -        |
|                                                         | 1000 to   | nW  | 0.027     | 0.035     | 0.031     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.647     | 0.783     | 0.731     | Pass   | ≤ 20     |
|                                                         | 12500 MHz | MHz | 23 728.00 | 24 048.00 | 25 744.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx3) | 30 to     | nW  | 0.002     | 0.002     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 96.93     | 63.95     | 62.01     | -      | -        |
|                                                         | 1000 to   | nW  | 0.016     | 0.016     | 0.016     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 709.00  | 9 883.00  | 6 598.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.576     | 0.538     | 0.584     | Pass   | ≤ 20     |
|                                                         | 12500 MHz | MHz | 22 352.00 | 24 896.00 | 24 400.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Sum) | 30 to     | nW  | 0.338     | 0.275     | 0.286     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | -         | -         | -         | -      | -        |
|                                                         | 1000 to   | nW  | 0.134     | 0.150     | 0.143     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | -         | -         | -         | -      | -        |
|                                                         | 10000 to  | nW  | 2.677     | 2.679     | 2.703     | Pass   | ≤ 20     |
|                                                         | 12500 MHz | MHz | -         | -         | -         | -      | -        |
| Burst Length of Transmitted Signals                     |           |     | Good      | Good      | Good      | Pass   | ≤ 8 ms   |
| Carrier Sensing Function                                |           |     | Good      | Good      | Good      | Pass   | 100 mV/m |
| Interference Prevention Function                        |           |     | Good      |           |           | Pass   | -        |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                             |                                                                    |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>#708, Creation Hall, Yongin Songdam College, 61<br/>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>Korea<br/>Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/>SDCC-2020-00128<br/>Page (46) / (135) pages</p> |  |
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## 4.2.3.2. Middle Channel

| Channel Number               | ch.    | 40       |          |          | Result | Limit      |
|------------------------------|--------|----------|----------|----------|--------|------------|
| Measurement Frequency        | MHz    | 5200     |          |          |        |            |
| Voltage                      | Vdc    | 10.80    | 12.00    | 13.20    | -      | -          |
| Frequency Measurements (Tx0) | MHz    | 5 199.94 | 5 199.94 | 5 199.94 | -      | -          |
| Frequency Tolerance (Tx0)    | ppm    | -11.361  | -11.336  | -11.306  | Pass   | ± 20       |
| Frequency Measurements (Tx1) | MHz    | 5 199.94 | 5 199.94 | 5 199.94 | -      | -          |
| Frequency Tolerance (Tx1)    | ppm    | -11.359  | -11.353  | -11.316  | Pass   | ± 20       |
| Frequency Measurements (Tx2) | MHz    | 5 199.94 | 5 199.94 | 5 199.94 | -      | -          |
| Frequency Tolerance (Tx2)    | ppm    | -11.271  | -11.231  | -11.170  | Pass   | ± 20       |
| Frequency Measurements (Tx3) | MHz    | 5 199.94 | 5 199.94 | 5 199.94 | -      | -          |
| Frequency Tolerance (Tx3)    | ppm    | -11.177  | -11.181  | -11.140  | Pass   | ± 20       |
| Occupied Bandwidth (Tx0)     | MHz    | 17.950   | 17.990   | 18.000   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx1)     | MHz    | 17.880   | 17.910   | 18.000   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx2)     | MHz    | 17.980   | 17.910   | 17.960   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx3)     | MHz    | 17.900   | 17.910   | 17.960   | Pass   | ≤ 20       |
| RF Output Power (Tx0)        | mW/MHz | 0.334    | 0.328    | 0.330    | Pass   | ≤ 10.0     |
| RF Output Power (Tx1)        | mW/MHz | 0.506    | 0.507    | 0.478    | Pass   | ≤ 10.0     |
| RF Output Power (Tx2)        | mW/MHz | 0.327    | 0.325    | 0.323    | Pass   | ≤ 10.0     |
| RF Output Power (Tx3)        | mW/MHz | 0.617    | 0.600    | 0.602    | Pass   | ≤ 10.0     |
| RF Output Power (Sum)        | mW/MHz | 1.784    | 1.760    | 1.733    | Pass   | ≤ 10.0     |
| RF Output Power Tolerance    | %      | -55.41   | -56.01   | -56.67   | Pass   | +20 to -80 |
| E.I.R.P. (Tx0)               | mW/MHz | 0.530    | 0.520    | 0.523    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx1)               | mW/MHz | 0.802    | 0.803    | 0.757    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx2)               | mW/MHz | 0.518    | 0.514    | 0.512    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx3)               | mW/MHz | 0.977    | 0.952    | 0.955    | Pass   | ≤ 10.0     |
| E.I.R.P. (Sum)               | mW/MHz | 2.827    | 2.789    | 2.747    | Pass   | ≤ 10.0     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                             |                                                                    |  |
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|  <p><b>SongDam Certification Center</b><br/>#708, Creation Hall, Yongin Songdam College, 61<br/>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>Korea<br/>Tel: +82-31-333-3220 Fax: +82-31-624-8955</p> | <p>Report No.:<br/>SDCC-2020-00128<br/>Page (47) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|

| Channel Number                                          |           | ch.    | 40        |           |           | Result | Limit |
|---------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |           | MHz    | 5200      |           |           |        |       |
| Voltage                                                 |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx0) | 30 to     | uW/MHz | 0.026     | 0.018     | 0.173     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 5 114.58  | 2 567.19  | 831.49    | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.175     | 0.188     | 0.164     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 328.57 | 24 947.62 | 25 607.94 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx1) | 30 to     | uW/MHz | 0.034     | 0.026     | 0.147     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 831.49    | 5 119.69  | 831.49    | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.172     | 0.221     | 0.186     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 968.25 | 24 039.68 | 24 328.57 | -      | -     |
| unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx2) | 30 to     | uW/MHz | 0.026     | 0.028     | 0.023     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 3 190.00  | 5 124.79  | 5 124.79  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.173     | 0.274     | 0.186     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 25 607.94 | 24 947.62 | 23 977.77 | -      | -     |
| unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx3) | 30 to     | uW/MHz | 0.040     | 0.037     | 0.033     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 5 124.79  | 5 124.79  | 5 119.69  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.205     | 0.174     | 0.195     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 23 647.61 | 24 638.09 | 24 307.93 | -      | -     |
| unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Sum) | 30 to     | uW/MHz | 0.125     | 0.109     | 0.375     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | -         | -         | -         | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.724     | 0.857     | 0.731     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | -         | -         | -         | -      | -     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                             |                                                                    |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>#708, Creation Hall, Yongin Songdam College, 61<br/>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>Korea<br/>Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/>SDCC-2020-00128<br/>Page (48) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|

| Channel Number                                |         | ch. | 40     |        |        | Result | Limit |
|-----------------------------------------------|---------|-----|--------|--------|--------|--------|-------|
| Measurement Frequency                         |         | MHz | 5200   |        |        |        |       |
| Voltage                                       |         | Vdc | 10.80  | 12.00  | 13.20  | -      | -     |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx0) | cf      | dB  | 15.41  | 15.40  | 15.38  | -      | -     |
|                                               | -20 MHz | dB  | -32.21 | -31.89 | -32.00 | Pass   | ≤-25  |
|                                               | 20 MHz  | dB  | -31.43 | -31.56 | -31.13 | Pass   | ≤-25  |
|                                               | -40 MHz | dB  | -52.93 | -52.89 | -52.89 | Pass   | ≤-40  |
|                                               | 40 MHz  | dB  | -52.05 | -52.06 | -52.03 | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx1) | cf      | dB  | 16.98  | 17.02  | 17.00  | -      | -     |
|                                               | -20 MHz | dB  | -32.70 | -32.79 | -32.41 | Pass   | ≤-25  |
|                                               | 20 MHz  | dB  | -31.38 | -31.44 | -31.09 | Pass   | ≤-25  |
|                                               | -40 MHz | dB  | -53.60 | -53.58 | -53.61 | Pass   | ≤-40  |
|                                               | 40 MHz  | dB  | -52.33 | -52.30 | -52.30 | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx2) | cf      | dB  | 15.39  | 15.36  | 15.40  | -      | -     |
|                                               | -20 MHz | dB  | -32.45 | -32.32 | -32.45 | Pass   | ≤-25  |
|                                               | 20 MHz  | dB  | -30.88 | -31.36 | -31.27 | Pass   | ≤-25  |
|                                               | -40 MHz | dB  | -53.24 | -53.25 | -53.29 | Pass   | ≤-40  |
|                                               | 40 MHz  | dB  | -52.07 | -52.07 | -52.15 | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx3) | cf      | dB  | 17.25  | 17.19  | 17.56  | -      | -     |
|                                               | -20 MHz | dB  | -32.32 | -32.11 | -32.07 | Pass   | ≤-25  |
|                                               | 20 MHz  | dB  | -31.72 | -31.73 | -31.62 | Pass   | ≤-25  |
|                                               | -40 MHz | dB  | -52.82 | -52.77 | -53.52 | Pass   | ≤-40  |
|                                               | 40 MHz  | dB  | -52.47 | -52.37 | -53.09 | Pass   | ≤-40  |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드 : keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (49) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 40       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5200     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx0) | 5135.0 to  | uW/MHz | 0.009    | 0.009    | 0.009    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 136.50 | 5 139.85 | 5 141.80 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.009    | 0.009    | 0.009    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 147.49 | 5 144.12 | 5 144.25 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.015    | 0.017    | 0.016    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.92 | 5 250.66 | 5 250.18 | -      | -     |
|                                    | Limit      | uW/MHz | 120.226  | 218.776  | 660.693  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.016    | 0.017    | 0.016    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 256.54 | 5 256.39 | 5 256.73 | -      | -     |
|                                    | Limit      | uW/MHz | 32.178   | 33.181   | 30.950   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.014    | 0.015    | 0.015    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 261.01 | 5 263.44 | 5 262.02 | -      | -     |
|                                    | Limit      | uW/MHz | 11.989   | 6.126    | 9.070    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.014    | 0.015    | 0.016    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 272.50 | 5 281.54 | 5 283.02 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=

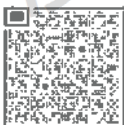


# TEST REPORT

|                                                                                                                                                                          |                                                                                                                                                                                                           |                                                                    |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>송담인증센터<br/>SongDam Certification Center</p> | <p><b>SongDam Certification Center</b><br/>#708, Creation Hall, Yongin Songdam College, 61<br/>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>Korea<br/>Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/>SDCC-2020-00128<br/>Page (50) / (135) pages</p> |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 40       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5200     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx1) | 5135.0 to  | uW/MHz | 0.013    | 0.015    | 0.015    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 139.32 | 5 135.53 | 5 135.15 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.019    | 0.017    | 0.015    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.28 | 5 143.89 | 5 146.55 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.027    | 0.032    | 0.024    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.41 | 5 250.39 | 5 250.52 | -      | -     |
|                                    | Limit      | uW/MHz | 389.045  | 407.380  | 301.995  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.034    | 0.026    | 0.031    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 255.74 | 5 256.97 | 5 257.69 | -      | -     |
|                                    | Limit      | uW/MHz | 37.902   | 29.467   | 25.429   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.024    | 0.025    | 0.031    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 262.79 | 5 261.21 | 5 264.62 | -      | -     |
|                                    | Limit      | uW/MHz | 7.332    | 11.345   | 4.422    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.023    | 0.024    | 0.022    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 277.12 | 5 273.29 | 5 278.00 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT



**SongDam Certification Center**  
#708, Creation Hall, Yongin Songdam College, 61  
Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,  
Korea  
Tel: +82-31-333-3220 Fax: +82-31-624-8855

Report No.:  
SDCC-2020-00128  
Page (51) / (135) pages

| Channel Number                     |            | ch.    | 40       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5200     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx2) | 5135.0 to  | uW/MHz | 0.016    | 0.016    | 0.013    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 138.16 | 5 140.68 | 5 139.89 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.016    | 0.017    | 0.018    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 143.83 | 5 143.89 | 5 149.90 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.031    | 0.030    | 0.024    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.85 | 5 250.61 | 5 250.36 | -      | -     |
|                                    | Limit      | uW/MHz | 141.254  | 245.471  | 436.516  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.031    | 0.028    | 0.027    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 256.18 | 5 256.72 | 5 256.79 | -      | -     |
|                                    | Limit      | uW/MHz | 34.638   | 31.014   | 30.573   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.024    | 0.026    | 0.026    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 263.81 | 5 262.97 | 5 265.11 | -      | -     |
|                                    | Limit      | uW/MHz | 5.531    | 6.976    | 3.862    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.028    | 0.033    | 0.029    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 281.94 | 5 282.82 | 5 279.77 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

|                                                                                   |                                                                                                                                                                                          |                                                           |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|
|  | <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61 Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145, Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br>SDCC-2020-00128<br>Page (52) / (135) pages |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|

| Channel Number               |            | ch.    | 40       |          |          | Result | Limit |
|------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency        |            | MHz    | 5200     |          |          |        |       |
| Voltage                      |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band Leakage Power (Tx3) | 5135.0 to  | uW/MHz | 0.020    | 0.022    | 0.024    | Pass   | -     |
|                              | 5142.0 MHz | MHz    | 5 139.68 | 5 141.67 | 5 141.10 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                              | 5142.0 to  | uW/MHz | 0.025    | 0.028    | 0.024    | Pass   | -     |
|                              | 5150.0 MHz | MHz    | 5 143.88 | 5 143.80 | 5 145.94 | -      | -     |
|                              | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                              | 5250.0 to  | uW/MHz | 0.030    | 0.034    | 0.028    | Pass   | -     |
|                              | 5251.0 MHz | MHz    | 5 250.46 | 5 250.89 | 5 250.82 | -      | -     |
|                              | Limit      | uW/MHz | 346.737  | 128.825  | 151.356  | -      | -     |
|                              | 5251.0 to  | uW/MHz | 0.032    | 0.031    | 0.035    | Pass   | -     |
|                              | 5260.0 MHz | MHz    | 5 254.02 | 5 255.78 | 5 256.37 | -      | -     |
|                              | Limit      | uW/MHz | 53.896   | 37.593   | 33.317   | -      | -     |
|                              | 5260.0 to  | uW/MHz | 0.028    | 0.028    | 0.029    | Pass   | -     |
|                              | 5266.7 MHz | MHz    | 5 265.35 | 5 260.81 | 5 264.36 | -      | -     |
|                              | Limit      | uW/MHz | 3.614    | 12.671   | 4.751    | -      | -     |
|                              | 5266.7 to  | uW/MHz | 0.036    | 0.028    | 0.036    | Pass   | -     |
|                              | 5365.0 MHz | MHz    | 5 278.50 | 5 285.77 | 5 272.60 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-824-8855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (53) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|

| Channel Number                        |            | ch.    | 40      |         |         | Result | Limit |
|---------------------------------------|------------|--------|---------|---------|---------|--------|-------|
| Measurement Frequency                 |            | MHz    | 5200    |         |         |        |       |
| Voltage                               |            | Vdc    | 10.80   | 12.00   | 13.20   | -      | -     |
| Out-Band<br>Leakage<br>Power<br>(Sum) | 5135.0 to  | uW/MHz | 0.059   | 0.062   | 0.061   | Pass   | -     |
|                                       | 5142.0 MHz | MHz    | 5139.68 | 5141.67 | 5141.80 | -      | -     |
|                                       | Limit      | uW/MHz | 2.500   | 2.500   | 2.500   | -      | -     |
|                                       | 5142.0 to  | uW/MHz | 0.069   | 0.073   | 0.066   | Pass   | -     |
|                                       | 5150.0 MHz | MHz    | 5149.28 | 5144.12 | 5149.90 | -      | -     |
|                                       | Limit      | uW/MHz | 15.000  | 15.000  | 15.000  | -      | -     |
|                                       | 5250.0 to  | uW/MHz | 0.103   | 0.113   | 0.092   | Pass   | -     |
|                                       | 5251.0 MHz | MHz    | 5250.92 | 5250.89 | 5250.82 | -      | -     |
|                                       | Limit      | uW/MHz | 120.226 | 128.825 | 151.356 | -      | -     |
|                                       | 5251.0 to  | uW/MHz | 0.113   | 0.102   | 0.109   | Pass   | -     |
|                                       | 5260.0 MHz | MHz    | 5256.54 | 5256.97 | 5257.69 | -      | -     |
|                                       | Limit      | uW/MHz | 32.178  | 29.467  | 25.429  | -      | -     |
|                                       | 5260.0 to  | uW/MHz | 0.090   | 0.094   | 0.101   | Pass   | -     |
|                                       | 5266.7 MHz | MHz    | 5265.35 | 5263.44 | 5265.11 | -      | -     |
|                                       | Limit      | uW/MHz | 3.614   | 6.126   | 3.862   | -      | -     |
|                                       | 5266.7 to  | uW/MHz | 0.102   | 0.101   | 0.104   | Pass   | -     |
|                                       | 5365.0 MHz | MHz    | 5281.94 | 5285.77 | 5283.02 | -      | -     |
|                                       | Limit      | uW/MHz | 2.500   | 2.500   | 2.500   | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                               |                                                                                                                                                           |                                                                    |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>SongDam Certification Center</p> | <p>#708, Creation Hall, Yongin Songdam College, 61 Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145, Korea<br/>Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/>SDCC-2020-00128<br/>Page (54) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|

| Channel Number                              |           | ch. | 40        |           |           | Result | Limit |
|---------------------------------------------|-----------|-----|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                       |           | MHz | 5200      |           |           |        |       |
| Voltage                                     |           | Vdc | 10.80     | 12.00     | 13.20     | -      | -     |
| Secondary emitted radio wave strength (Tx0) | 30 to     | nW  | 0.479     | 0.287     | 0.321     | Pass   | ≤ 4   |
|                                             | 1000 MHz  | MHz | 56.19     | 56.19     | 57.16     | -      | -     |
|                                             | 1000 to   | nW  | 0.060     | 0.062     | 0.062     | Pass   | ≤ 20  |
|                                             | 10000 MHz | MHz | 7 237.00  | 7 237.00  | 7 237.00  | -      | -     |
|                                             | 10000 to  | nW  | 0.749     | 0.613     | 0.668     | Pass   | ≤ 20  |
|                                             | 26000 MHz | MHz | 25 616.00 | 25 648.00 | 23 680.00 | -      | -     |
| Secondary emitted radio wave strength (Tx1) | 30 to     | nW  | 0.002     | 0.001     | 0.001     | Pass   | ≤ 4   |
|                                             | 1000 MHz  | MHz | 913.67    | 805.03    | 1 000.00  | -      | -     |
|                                             | 1000 to   | nW  | 0.027     | 0.032     | 0.030     | Pass   | ≤ 20  |
|                                             | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -     |
|                                             | 10000 to  | nW  | 0.653     | 0.723     | 0.605     | Pass   | ≤ 20  |
|                                             | 26000 MHz | MHz | 25 600.00 | 25 680.00 | 25 824.00 | -      | -     |
| Secondary emitted radio wave strength (Tx2) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4   |
|                                             | 1000 MHz  | MHz | 804.06    | 156.10    | 951.50    | -      | -     |
|                                             | 1000 to   | nW  | 0.029     | 0.035     | 0.032     | Pass   | ≤ 20  |
|                                             | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -     |
|                                             | 10000 to  | nW  | 0.740     | 0.663     | 0.714     | Pass   | ≤ 20  |
|                                             | 26000 MHz | MHz | 25 760.00 | 25 600.00 | 25 776.00 | -      | -     |
| Secondary emitted radio wave strength (Tx3) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4   |
|                                             | 1000 MHz  | MHz | 215.27    | 100.81    | 64.92     | -      | -     |
|                                             | 1000 to   | nW  | 0.019     | 0.015     | 0.015     | Pass   | ≤ 20  |
|                                             | 10000 MHz | MHz | 7 471.00  | 2 683.00  | 3 142.00  | -      | -     |
|                                             | 10000 to  | nW  | 0.759     | 1.157     | 0.644     | Pass   | ≤ 20  |
|                                             | 26000 MHz | MHz | 24 992.00 | 25 568.00 | 23 200.00 | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 81<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (55) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|

| Channel Number                                          |           | ch. | 40    |       |       | Result | Limit    |
|---------------------------------------------------------|-----------|-----|-------|-------|-------|--------|----------|
| Measurement Frequency                                   |           | MHz | 5200  |       |       |        |          |
| Voltage                                                 |           | Vdc | 10.80 | 12.00 | 13.20 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Sum) | 30 to     | nW  | 0.483 | 0.289 | 0.323 | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | -     | -     | -     | -      | -        |
|                                                         | 1000 to   | nW  | 0.135 | 0.144 | 0.138 | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | -     | -     | -     | -      | -        |
|                                                         | 10000 to  | nW  | 2.900 | 3.156 | 2.631 | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | -     | -     | -     | -      | -        |
| Burst Length of Transmitted Signals                     |           |     | Good  | Good  | Good  | Pass   | ≤ 8 ms   |
| Carrier Sensing Function                                |           |     | Good  | Good  | Good  | Pass   | 100 mV/m |
| Interference Prevention Function                        |           |     | Good  |       |       | Pass   | -        |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드 : keqzWxQdI30=



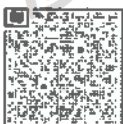
# TEST REPORT

|                                                                                                                                                                                                                                                                                             |                                                                    |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|

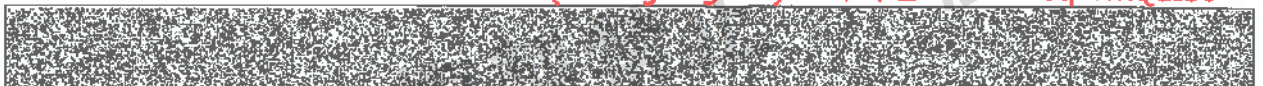
## 4.2.3.3. Highest Channel

| Channel Number               | ch.    | 48       |          |          | Result | Limit      |
|------------------------------|--------|----------|----------|----------|--------|------------|
| Measurement Frequency        | MHz    | 5240     |          |          |        |            |
| Voltage                      | Vdc    | 10.80    | 12.00    | 13.20    | -      | -          |
| Frequency Measurements (Tx0) | MHz    | 5 239.94 | 5 239.94 | 5 239.94 | -      | -          |
| Frequency Tolerance (Tx0)    | ppm    | -11.380  | -11.404  | -11.397  | Pass   | ± 20       |
| Frequency Measurements (Tx1) | MHz    | 5 239.94 | 5 239.94 | 5 239.94 | -      | -          |
| Frequency Tolerance (Tx1)    | ppm    | -11.320  | -11.259  | -11.229  | Pass   | ± 20       |
| Frequency Measurements (Tx2) | MHz    | 5 239.94 | 5 239.94 | 5 239.94 | -      | -          |
| Frequency Tolerance (Tx2)    | ppm    | -11.269  | -11.244  | -11.210  | Pass   | ± 20       |
| Frequency Measurements (Tx3) | MHz    | 5 239.94 | 5 239.94 | 5 239.94 | -      | -          |
| Frequency Tolerance (Tx3)    | ppm    | -11.181  | -11.097  | -11.025  | Pass   | ± 20       |
| Occupied Bandwidth (Tx0)     | MHz    | 17.950   | 17.940   | 17.950   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx1)     | MHz    | 17.880   | 17.980   | 17.920   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx2)     | MHz    | 17.860   | 17.920   | 17.950   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx3)     | MHz    | 17.960   | 17.880   | 17.930   | Pass   | ≤ 20       |
| RF Output Power (Tx0)        | mW/MHz | 0.822    | 0.815    | 0.822    | Pass   | ≤ 10.0     |
| RF Output Power (Tx1)        | mW/MHz | 0.974    | 1.086    | 1.077    | Pass   | ≤ 10.0     |
| RF Output Power (Tx2)        | mW/MHz | 1.219    | 1.228    | 1.163    | Pass   | ≤ 10.0     |
| RF Output Power (Tx3)        | mW/MHz | 1.019    | 1.092    | 1.126    | Pass   | ≤ 10.0     |
| RF Output Power (Sum)        | mW/MHz | 4.035    | 4.221    | 4.188    | Pass   | ≤ 10.0     |
| RF Output Power Tolerance    | %      | 0.86     | 5.53     | 4.69     | Pass   | +20 to -80 |
| E.I.R.P. (Tx0)               | mW/MHz | 1.303    | 1.291    | 1.303    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx1)               | mW/MHz | 1.544    | 1.722    | 1.707    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx2)               | mW/MHz | 1.932    | 1.947    | 1.843    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx3)               | mW/MHz | 1.616    | 1.730    | 1.785    | Pass   | ≤ 10.0     |
| E.I.R.P. (Sum)               | mW/MHz | 6.394    | 6.690    | 6.637    | Pass   | ≤ 10.0     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                             |                                                                    |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|

| Channel Number                                          |           | ch.    | 48        |           |           | Result | Limit |
|---------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |           | MHz    | 5240      |           |           |        |       |
| Voltage                                                 |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx0) | 30 to     | uW/MHz | 0.030     | 0.623     | 0.024     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 831.49    | 831.49    | 836.59    | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.155     | 0.199     | 0.160     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 23 668.25 | 25 009.52 | 25 711.11 | -      | -     |
| unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx1) | 30 to     | uW/MHz | 0.052     | 0.020     | 0.047     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 831.49    | 2 526.35  | 831.49    | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.176     | 0.190     | 0.197     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 968.25 | 24 390.47 | 24 349.20 | -      | -     |
| unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx2) | 30 to     | uW/MHz | 0.022     | 0.020     | 0.020     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 3 705.60  | 3 041.95  | 3 036.85  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.172     | 0.176     | 0.168     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 390.47 | 24 638.09 | 23 998.41 | -      | -     |
| unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx3) | 30 to     | uW/MHz | 0.242     | 0.234     | 0.022     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 831.49    | 908.06    | 5 124.79  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.183     | 0.192     | 0.178     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 390.47 | 24 307.93 | 24 307.93 | -      | -     |
| unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Sum) | 30 to     | uW/MHz | 0.346     | 0.897     | 0.113     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | -         | -         | -         | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.686     | 0.756     | 0.703     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | -         | -         | -         | -      | -     |

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# TEST REPORT

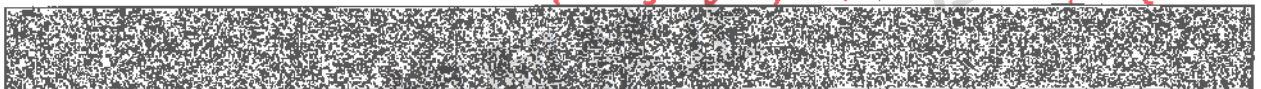
|                                                                                                                                                                                                                                                                                             |                                                                    |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------|--|

| Channel Number                                |         | ch. | 48     |        |        | Result | Limit |
|-----------------------------------------------|---------|-----|--------|--------|--------|--------|-------|
| Measurement Frequency                         |         | MHz | 5240   |        |        |        |       |
| Voltage                                       |         | Vdc | 10.80  | 12.00  | 13.20  | -      | -     |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx0) | cf      | dB  | 19.48  | 19.54  | 19.53  | -      | -     |
|                                               | -20 MHz | dB  | -31.11 | -31.10 | -31.43 | Pass   | ≤-25  |
|                                               | 20 MHz  | dB  | -31.52 | -31.23 | -31.23 | Pass   | ≤-25  |
|                                               | -40 MHz | dB  | -52.71 | -52.67 | -52.73 | Pass   | ≤-40  |
|                                               | 40 MHz  | dB  | -52.51 | -52.46 | -52.54 | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx1) | cf      | dB  | 20.29  | 20.24  | 20.26  | -      | -     |
|                                               | -20 MHz | dB  | -31.78 | -31.62 | -32.27 | Pass   | ≤-25  |
|                                               | 20 MHz  | dB  | -31.58 | -31.22 | -31.32 | Pass   | ≤-25  |
|                                               | -40 MHz | dB  | -53.12 | -53.02 | -53.13 | Pass   | ≤-40  |
|                                               | 40 MHz  | dB  | -52.84 | -52.79 | -52.86 | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx2) | cf      | dB  | 20.74  | 20.85  | 20.84  | -      | -     |
|                                               | -20 MHz | dB  | -31.96 | -32.49 | -31.97 | Pass   | ≤-25  |
|                                               | 20 MHz  | dB  | -30.66 | -31.01 | -31.33 | Pass   | ≤-25  |
|                                               | -40 MHz | dB  | -53.62 | -53.01 | -53.11 | Pass   | ≤-40  |
|                                               | 40 MHz  | dB  | -52.70 | -52.25 | -52.18 | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx3) | cf      | dB  | 20.58  | 20.62  | 20.60  | -      | -     |
|                                               | -20 MHz | dB  | -32.08 | -31.82 | -31.93 | Pass   | ≤-25  |
|                                               | 20 MHz  | dB  | -31.62 | -31.20 | -31.25 | Pass   | ≤-25  |
|                                               | -40 MHz | dB  | -53.15 | -53.22 | -53.11 | Pass   | ≤-40  |
|                                               | 40 MHz  | dB  | -52.99 | -53.08 | -53.00 | Pass   | ≤-40  |

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| Channel Number                     |            | ch.    | 48       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5240     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx0) | 5135.0 to  | uW/MHz | 0.006    | 0.006    | 0.006    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 139.21 | 5 140.31 | 5 135.12 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.007    | 0.007    | 0.007    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 148.28 | 5 145.62 | 5 147.81 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.359    | 0.282    | 0.403    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.01 | 5 250.01 | 5 250.06 | -      | -     |
|                                    | Limit      | uW/MHz | 977.237  | 977.237  | 870.964  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.108    | 0.114    | 0.093    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 251.06 | 5 251.05 | 5 251.07 | -      | -     |
|                                    | Limit      | uW/MHz | 98.779   | 98.982   | 98.577   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.081    | 0.100    | 0.075    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 261.75 | 5 260.05 | 5 263.42 | -      | -     |
|                                    | Limit      | uW/MHz | 9.772    | 15.631   | 6.160    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.019    | 0.022    | 0.014    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 267.19 | 5 266.99 | 5 269.85 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

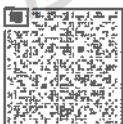


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| Channel Number                     |            | ch.    | 48       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5240     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx1) | 5135.0 to  | uW/MHz | 0.012    | 0.011    | 0.011    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 140.30 | 5 138.82 | 5 139.11 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.015    | 0.016    | 0.013    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 147.67 | 5 144.63 | 5 148.62 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.483    | 0.428    | 0.450    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.00 | 5 250.01 | 5 250.01 | -      | -     |
|                                    | Limit      | uW/MHz | 1000.000 | 977.237  | 977.237  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.136    | 0.147    | 0.199    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 251.02 | 5 251.03 | 5 251.00 | -      | -     |
|                                    | Limit      | uW/MHz | 99.591   | 99.388   | 100.000  | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.113    | 0.107    | 0.107    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 262.10 | 5 260.14 | 5 260.40 | -      | -     |
|                                    | Limit      | uW/MHz | 8.872    | 15.248   | 14.191   | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.029    | 0.028    | 0.029    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 267.39 | 5 274.86 | 5 271.12 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |  |
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 48       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5240     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx2) | 5135.0 to  | uW/MHz | 0.009    | 0.010    | 0.011    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 138.56 | 5 141.54 | 5 141.62 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.011    | 0.011    | 0.011    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 145.44 | 5 146.85 | 5 145.54 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.552    | 0.435    | 0.451    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.01 | 5 250.00 | 5 250.00 | -      | -     |
|                                    | Limit      | uW/MHz | 977.237  | 1000.000 | 1000.000 | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.146    | 0.138    | 0.148    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 251.07 | 5 251.00 | 5 251.00 | -      | -     |
|                                    | Limit      | uW/MHz | 98.577   | 100.000  | 100.000  | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.090    | 0.081    | 0.090    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 260.90 | 5 260.45 | 5 260.35 | -      | -     |
|                                    | Limit      | uW/MHz | 12.359   | 13.996   | 14.388   | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.025    | 0.035    | 0.027    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 271.52 | 5 270.93 | 5 315.36 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

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|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|
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|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 48       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5240     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx3) | 5135.0 to  | uW/MHz | 0.014    | 0.013    | 0.015    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 141.76 | 5 139.85 | 5 138.65 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.015    | 0.014    | 0.015    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 146.94 | 5 149.26 | 5 148.58 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.366    | 0.282    | 0.403    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.00 | 5 250.01 | 5 250.01 | -      | -     |
|                                    | Limit      | uW/MHz | 1000.000 | 977.237  | 977.237  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.108    | 0.114    | 0.091    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 251.03 | 5 251.00 | 5 251.05 | -      | -     |
|                                    | Limit      | uW/MHz | 99.388   | 100.000  | 98.982   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.403    | 0.131    | 0.121    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 262.65 | 5 260.09 | 5 260.17 | -      | -     |
|                                    | Limit      | uW/MHz | 7.621    | 15.460   | 15.122   | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.029    | 0.027    | 0.024    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 269.16 | 5 271.52 | 5 277.32 | -      | -     |
| Limit                              | uW/MHz     | 2.500  | 2.500    | 2.500    | -        | -      |       |

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| Channel Number                                          |            | ch.    | 48        |           |           | Result | Limit |
|---------------------------------------------------------|------------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |            | MHz    | 5240      |           |           |        |       |
| Voltage                                                 |            | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Out-Band<br>Leakage<br>Power<br>(Sum)                   | 5135.0 to  | uW/MHz | 0.041     | 0.040     | 0.043     | Pass   | -     |
|                                                         | 5142.0 MHz | MHz    | 5141.76   | 5141.54   | 5141.62   | -      | -     |
|                                                         | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
|                                                         | 5142.0 to  | uW/MHz | 0.048     | 0.049     | 0.046     | Pass   | -     |
|                                                         | 5150.0 MHz | MHz    | 5148.28   | 5149.26   | 5148.62   | -      | -     |
|                                                         | Limit      | uW/MHz | 15.000    | 15.000    | 15.000    | -      | -     |
|                                                         | 5250.0 to  | uW/MHz | 1.759     | 1.426     | 1.707     | Pass   | -     |
|                                                         | 5251.0 MHz | MHz    | 5250.01   | 5250.01   | 5250.06   | -      | -     |
|                                                         | Limit      | uW/MHz | 977.237   | 977.237   | 870.964   | -      | -     |
|                                                         | 5251.0 to  | uW/MHz | 0.498     | 0.513     | 0.531     | Pass   | -     |
|                                                         | 5260.0 MHz | MHz    | 5251.07   | 5251.05   | 5251.07   | -      | -     |
|                                                         | Limit      | uW/MHz | 98.577    | 98.982    | 98.577    | -      | -     |
|                                                         | 5260.0 to  | uW/MHz | 0.687     | 0.419     | 0.393     | Pass   | -     |
|                                                         | 5266.7 MHz | MHz    | 5262.65   | 5260.45   | 5263.42   | -      | -     |
|                                                         | Limit      | uW/MHz | 7.621     | 13.996    | 6.160     | -      | -     |
|                                                         | 5266.7 to  | uW/MHz | 0.101     | 0.112     | 0.094     | Pass   | -     |
|                                                         | 5365.0 MHz | MHz    | 5271.52   | 5274.86   | 5315.36   | -      | -     |
|                                                         | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx0) | 30 to      | nW     | 0.253     | 0.282     | 0.326     | Pass   | ≤ 4   |
|                                                         | 1000 MHz   | MHz    | 56.19     | 57.16     | 56.19     | -      | -     |
|                                                         | 1000 to    | nW     | 0.063     | 0.065     | 0.064     | Pass   | ≤ 20  |
|                                                         | 10000 MHz  | MHz    | 3 619.00  | 7 237.00  | 7 237.00  | -      | -     |
|                                                         | 10000 to   | nW     | 0.635     | 0.763     | 0.978     | Pass   | ≤ 20  |
|                                                         | 26000 MHz  | MHz    | 22 976.00 | 25 792.00 | 25 280.00 | -      | -     |

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# TEST REPORT



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Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,  
Korea  
Tel: +82-31-333-3220 Fax: +82-31-824-8855

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| Channel Number                                          |           | ch. | 48        |           |           | Result | Limit    |
|---------------------------------------------------------|-----------|-----|-----------|-----------|-----------|--------|----------|
| Measurement Frequency                                   |           | MHz | 5240      |           |           |        |          |
| Voltage                                                 |           | Vdc | 10.80     | 12.00     | 13.20     | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx1) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 905.91    | 121.18    | 1 000.00  | -      | -        |
|                                                         | 1000 to   | nW  | 0.037     | 0.030     | 0.028     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.637     | 0.800     | 0.649     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 25 600.00 | 23 792.00 | 25 776.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx2) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 870.99    | 114.39    | 112.45    | -      | -        |
|                                                         | 1000 to   | nW  | 0.030     | 0.031     | 0.031     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.624     | 0.640     | 0.709     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 19 424.00 | 23 200.00 | 25 936.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx3) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 249.22    | 250.19    | 154.16    | -      | -        |
|                                                         | 1000 to   | nW  | 0.015     | 0.016     | 0.016     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 700.00  | 2 683.00  | 3 727.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.515     | 0.564     | 0.761     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 23 488.00 | 25 712.00 | 23 504.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Sum) | 30 to     | nW  | 0.255     | 0.284     | 0.328     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | -         | -         | -         | -      | -        |
|                                                         | 1000 to   | nW  | 0.146     | 0.141     | 0.139     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | -         | -         | -         | -      | -        |
|                                                         | 10000 to  | nW  | 2.410     | 2.767     | 3.098     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | -         | -         | -         | -      | -        |
| Burst Length of Transmitted Signals                     |           |     | Good      | Good      | Good      | Pass   | ≤ 8 ms   |
| Carrier Sensing Function                                |           |     | Good      | Good      | Good      | Pass   | 100 mV/m |
| Interference Prevention Function                        |           |     | Good      |           |           | Pass   | -        |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                             |                                                                    |  |
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## 4.3. 802.11n (HT40)

### 4.3.1. Duty cycle

|            |          |       |    |
|------------|----------|-------|----|
| Duty Cycle | On       | 0.129 | ms |
|            | Off      | 0.022 | ms |
|            | On + Off | 0.151 | ms |
|            | Ratio    | 85.3  | %  |

### 4.3.2. Declaration RF Output Power

|                       |       |         |
|-----------------------|-------|---------|
| Declaration RF Output | 3     | mW/MHz  |
| Power                 | 4.771 | dBm/MHz |
| E.I.R.P.              | 8.307 | mW/MHz  |
|                       | 6.771 | dBm/MHz |

### 4.3.3. Test Result

#### 4.3.3.1. Lowest Channel

| Channel Number               | ch. | 38       |          |          | Result | Limit |
|------------------------------|-----|----------|----------|----------|--------|-------|
| Measurement Frequency        | MHz | 5190     |          |          |        |       |
| Voltage                      | Vdc | 10.80    | 12.00    | 13.20    | -      | -     |
| Frequency Measurements (Tx0) | MHz | 5 189.97 | 5 189.97 | 5 189.97 | -      | -     |
| Frequency Tolerance (Tx0)    | ppm | -5.717   | -5.714   | -5.714   | Pass   | ± 20  |
| Frequency Measurements (Tx1) | MHz | 5 189.97 | 5 189.97 | 5 189.97 | -      | -     |
| Frequency Tolerance (Tx1)    | ppm | -5.751   | -5.752   | -5.752   | Pass   | ± 20  |
| Frequency Measurements (Tx2) | MHz | 5 189.97 | 5 189.97 | 5 189.97 | -      | -     |
| Frequency Tolerance (Tx2)    | ppm | -5.752   | -5.745   | -5.742   | Pass   | ± 20  |
| Frequency Measurements (Tx3) | MHz | 5 189.97 | 5 189.97 | 5 189.97 | -      | -     |
| Frequency Tolerance (Tx3)    | ppm | -5.775   | -5.780   | -5.774   | Pass   | ± 20  |
| Occupied Bandwidth (Tx0)     | MHz | 36.360   | 36.360   | 36.360   | Pass   | ≤ 40  |
| Occupied Bandwidth (Tx1)     | MHz | 36.300   | 36.320   | 36.320   | Pass   | ≤ 40  |
| Occupied Bandwidth (Tx2)     | MHz | 36.300   | 36.260   | 36.320   | Pass   | ≤ 40  |
| Occupied Bandwidth (Tx3)     | MHz | 36.340   | 36.340   | 36.430   | Pass   | ≤ 40  |

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# TEST REPORT

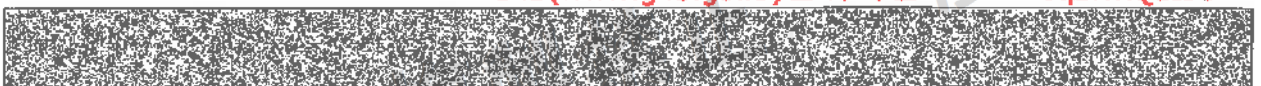
|                                                                                                                   |                                                                                                                                                                                                |                                                           |                                                                                     |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------|
| <br>SongDam Certification Center | <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br>SDCC-2020-00128<br>Page (86) / (135) pages |  |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------|

| Channel Number                                          |           | ch.    | 38        |           |           | Result | Limit      |
|---------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|------------|
| Measurement Frequency                                   |           | MHz    | 5190      |           |           |        |            |
| Voltage                                                 |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -          |
| RF Output Power (Tx0)                                   |           | mW/MHz | 0.690     | 0.758     | 0.651     | Pass   | ≤ 5.0      |
| RF Output Power (Tx1)                                   |           | mW/MHz | 0.554     | 0.552     | 0.524     | Pass   | ≤ 5.0      |
| RF Output Power (Tx2)                                   |           | mW/MHz | 0.427     | 0.417     | 0.412     | Pass   | ≤ 5.0      |
| RF Output Power (Tx3)                                   |           | mW/MHz | 0.521     | 0.523     | 0.529     | Pass   | ≤ 5.0      |
| RF Output Power (Sum)                                   |           | mW/MHz | 2.193     | 2.250     | 2.116     | Pass   | ≤ 5.0      |
| RF Output Power Tolerance                               |           | %      | -26.91    | -25.00    | -29.46    | Pass   | +20 to -80 |
| E.I.R.P. (Tx0)                                          |           | mW/MHz | 1.094     | 1.202     | 1.032     | Pass   | ≤ 5.0      |
| E.I.R.P. (Tx1)                                          |           | mW/MHz | 0.878     | 0.875     | 0.830     | Pass   | ≤ 5.0      |
| E.I.R.P. (Tx2)                                          |           | mW/MHz | 0.677     | 0.660     | 0.653     | Pass   | ≤ 5.0      |
| E.I.R.P. (Tx3)                                          |           | mW/MHz | 0.826     | 0.828     | 0.839     | Pass   | ≤ 5.0      |
| E.I.R.P. (Sum)                                          |           | mW/MHz | 3.475     | 3.566     | 3.354     | Pass   | ≤ 5.0      |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx0) | 30 to     | uW/MHz | 0.087     | 0.103     | 0.064     | Pass   | ≤ 2.5      |
|                                                         | 5100 MHz  | MHz    | 5 141.60  | 5 141.60  | 5 141.60  | -      | -          |
|                                                         | 5400 to   | uW/MHz | 0.197     | 0.179     | 0.161     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 25 627.01 | 24 300.83 | 24 901.76 | -      | -          |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx1) | 30 to     | uW/MHz | 0.043     | 0.042     | 0.042     | Pass   | ≤ 2.5      |
|                                                         | 5100 MHz  | MHz    | 5 131.38  | 5 136.49  | 5 121.15  | -      | -          |
|                                                         | 5400 to   | uW/MHz | 0.211     | 0.179     | 0.181     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 24 963.92 | 24 383.72 | 23 637.74 | -      | -          |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx2) | 30 to     | uW/MHz | 0.025     | 0.024     | 0.026     | Pass   | ≤ 2.5      |
|                                                         | 5100 MHz  | MHz    | 5 141.60  | 5 044.48  | 5 131.38  | -      | -          |
|                                                         | 5400 to   | uW/MHz | 0.164     | 0.170     | 0.178     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 25 336.91 | 24 611.65 | 23 658.46 | -      | -          |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx3) | 30 to     | uW/MHz | 0.117     | 0.076     | 0.065     | Pass   | ≤ 2.5      |
|                                                         | 5100 MHz  | MHz    | 5 141.60  | 5 141.60  | 5 141.60  | -      | -          |
|                                                         | 5400 to   | uW/MHz | 0.174     | 0.171     | 0.170     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 24 300.83 | 24 943.20 | 23 990.00 | -      | -          |

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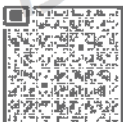


# TEST REPORT

|                                                                                                                                                                                                                                                                                             |                                                                           |  |
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------|--|

| Channel Number                                          |           | ch.    | 38     |        |        | Result | Limit |
|---------------------------------------------------------|-----------|--------|--------|--------|--------|--------|-------|
| Measurement Frequency                                   |           | MHz    | 5190   |        |        |        |       |
| Voltage                                                 |           | Vdc    | 10.80  | 12.00  | 13.20  | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Sum) | 30 to     | uW/MHz | 0.273  | 0.246  | 0.196  | Pass   | ≤ 2.5 |
|                                                         | 5100 MHz  | MHz    | -      | -      | -      | -      | -     |
|                                                         | 5400 to   | uW/MHz | 0.746  | 0.700  | 0.689  | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | -      | -      | -      | -      | -     |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx0)           | cf        | dB     | 21.14  | 21.10  | 21.14  | -      | -     |
|                                                         | -40 MHz   | dB     | -42.12 | -42.25 | -42.22 | Pass   | ≤-25  |
|                                                         | 40 MHz    | dB     | -41.52 | -41.19 | -41.11 | Pass   | ≤-25  |
|                                                         | -80 MHz   | dB     | -51.67 | -51.62 | -51.69 | Pass   | ≤-40  |
|                                                         | 80 MHz    | dB     | -50.65 | -50.65 | -50.56 | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx1)           | cf        | dB     | 20.08  | 20.03  | 19.96  | -      | -     |
|                                                         | -40 MHz   | dB     | -43.89 | -44.06 | -43.63 | Pass   | ≤-25  |
|                                                         | 40 MHz    | dB     | -41.99 | -42.13 | -41.87 | Pass   | ≤-25  |
|                                                         | -80 MHz   | dB     | -52.52 | -52.42 | -52.49 | Pass   | ≤-40  |
|                                                         | 80 MHz    | dB     | -50.44 | -50.29 | -50.33 | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx2)           | cf        | dB     | 18.90  | 18.83  | 18.88  | -      | -     |
|                                                         | -40 MHz   | dB     | -43.66 | -43.51 | -43.80 | Pass   | ≤-25  |
|                                                         | 40 MHz    | dB     | -42.38 | -42.32 | -42.39 | Pass   | ≤-25  |
|                                                         | -80 MHz   | dB     | -52.67 | -52.64 | -52.66 | Pass   | ≤-40  |
|                                                         | 80 MHz    | dB     | -49.55 | -49.50 | -49.60 | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx3)           | cf        | dB     | 20.27  | 20.19  | 20.19  | -      | -     |
|                                                         | -40 MHz   | dB     | -42.09 | -41.96 | -42.04 | Pass   | ≤-25  |
|                                                         | 40 MHz    | dB     | -40.85 | -40.90 | -40.98 | Pass   | ≤-25  |
|                                                         | -80 MHz   | dB     | -52.00 | -51.46 | -51.45 | Pass   | ≤-40  |
|                                                         | 80 MHz    | dB     | -51.15 | -50.73 | -50.61 | Pass   | ≤-40  |

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|

| Channel Number               |            | ch.    | 38       |          |          | Result | Limit |
|------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency        |            | MHz    | 5190     |          |          |        |       |
| Voltage                      |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band Leakage Power (Tx0) | 5100.0 to  | uW/MHz | 0.040    | 0.030    | 0.028    | Pass   | -     |
|                              | 5141.6 MHz | MHz    | 5 140.02 | 5 139.98 | 5 140.93 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                              | 5141.6 to  | uW/MHz | 0.073    | 0.060    | 0.097    | Pass   | -     |
|                              | 5150.0 MHz | MHz    | 5 148.85 | 5 147.62 | 5 146.43 | -      | -     |
|                              | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                              | 5250.0 to  | uW/MHz | 0.041    | 0.035    | 0.038    | Pass   | -     |
|                              | 5251.0 MHz | MHz    | 5 250.33 | 5 250.90 | 5 250.19 | -      | -     |
|                              | Limit      | uW/MHz | 233.868  | 62.946   | 322.827  | -      | -     |
|                              | 5251.0 to  | uW/MHz | 0.039    | 0.041    | 0.046    | Pass   | -     |
|                              | 5270.0 MHz | MHz    | 5 260.86 | 5 252.65 | 5 252.60 | -      | -     |
|                              | Limit      | uW/MHz | 19.223   | 42.609   | 42.816   | -      | -     |
|                              | 5270.0 to  | uW/MHz | 0.035    | 0.034    | 0.032    | Pass   | -     |
|                              | 5278.4 MHz | MHz    | 5274.900 | 5272.830 | 5270.000 | -      | -     |
|                              | Limit      | uW/MHz | 4.027    | 5.360    | 7.924    | -      | -     |
|                              | 5278.4 to  | uW/MHz | 0.061    | 0.053    | 0.062    | Pass   | -     |
|                              | 5400.0 MHz | MHz    | 5356.950 | 5337.010 | 5339.320 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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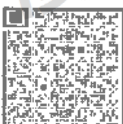
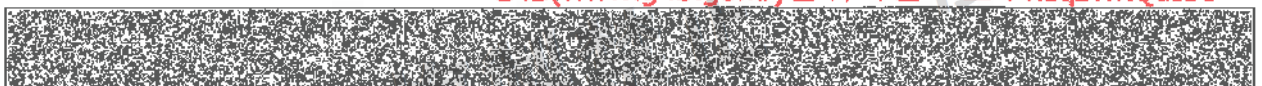
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|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 38       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5190     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx1) | 5100.0 to  | uW/MHz | 0.102    | 0.066    | 0.060    | Pass   | -     |
|                                    | 5141.6 MHz | MHz    | 5 141.39 | 5 137.32 | 5 141.52 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5141.6 to  | uW/MHz | 0.252    | 0.229    | 0.244    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.88 | 5 149.92 | 5 149.82 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.052    | 0.042    | 0.042    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.80 | 5 250.99 | 5 250.09 | -      | -     |
|                                    | Limit      | uW/MHz | 79.245   | 51.165   | 406.415  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.064    | 0.043    | 0.044    | Pass   | -     |
|                                    | 5270.0 MHz | MHz    | 5 257.54 | 5 254.61 | 5 256.97 | -      | -     |
|                                    | Limit      | uW/MHz | 26.522   | 35.235   | 28.029   | -      | -     |
|                                    | 5270.0 to  | uW/MHz | 0.041    | 0.038    | 0.036    | Pass   | -     |
|                                    | 5278.4 MHz | MHz    | 5275.000 | 5273.230 | 5271.230 | -      | -     |
|                                    | Limit      | uW/MHz | 3.972    | 5.072    | 6.686    | -      | -     |
|                                    | 5278.4 to  | uW/MHz | 0.060    | 0.066    | 0.062    | Pass   | -     |
|                                    | 5400.0 MHz | MHz    | 5346.010 | 5344.920 | 5347.230 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT



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| Channel Number                     |            | ch.    | 38       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5190     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx2) | 5100.0 to  | uW/MHz | 0.031    | 0.026    | 0.023    | Pass   | -     |
|                                    | 5141.6 MHz | MHz    | 5 140.98 | 5 139.69 | 5 141.35 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5141.6 to  | uW/MHz | 0.135    | 0.069    | 0.075    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 147.03 | 5 149.51 | 5 149.67 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.039    | 0.041    | 0.044    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.24 | 5 250.60 | 5 250.32 | -      | -     |
|                                    | Limit      | uW/MHz | 287.720  | 125.594  | 239.315  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.046    | 0.050    | 0.045    | Pass   | -     |
|                                    | 5270.0 MHz | MHz    | 5 259.47 | 5 253.93 | 5 252.58 | -      | -     |
|                                    | Limit      | uW/MHz | 21.996   | 37.636   | 42.899   | -      | -     |
|                                    | 5270.0 to  | uW/MHz | 0.038    | 0.039    | 0.036    | Pass   | -     |
|                                    | 5278.4 MHz | MHz    | 5272.760 | 5276.450 | 5272.570 | -      | -     |
|                                    | Limit      | uW/MHz | 5.412    | 3.251    | 5.556    | -      | -     |
|                                    | 5278.4 to  | uW/MHz | 0.093    | 0.088    | 0.075    | Pass   | -     |
|                                    | 5400.0 MHz | MHz    | 5361.330 | 5345.040 | 5337.380 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                           |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|
|  <b>SongDam Certification Center</b><br>#70B, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br>SDCC-2020-00128<br>Page (71) / (135) pages |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|

| Channel Number               |            | ch.    | 38       |          |          | Result | Limit |
|------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency        |            | MHz    | 5190     |          |          |        |       |
| Voltage                      |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band Leakage Power (Tx3) | 5100.0 to  | uW/MHz | 0.155    | 0.158    | 0.154    | Pass   | -     |
|                              | 5141.6 MHz | MHz    | 5 140.85 | 5 141.23 | 5 141.02 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                              | 5141.6 to  | uW/MHz | 0.282    | 0.295    | 0.280    | Pass   | -     |
|                              | 5150.0 MHz | MHz    | 5 149.02 | 5 149.92 | 5 149.97 | -      | -     |
|                              | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                              | 5250.0 to  | uW/MHz | 0.051    | 0.068    | 0.053    | Pass   | -     |
|                              | 5251.0 MHz | MHz    | 5 250.43 | 5 250.90 | 5 250.54 | -      | -     |
|                              | Limit      | uW/MHz | 185.768  | 62.946   | 144.202  | -      | -     |
|                              | 5251.0 to  | uW/MHz | 0.053    | 0.057    | 0.043    | Pass   | -     |
|                              | 5270.0 MHz | MHz    | 5 258.14 | 5 251.40 | 5 255.26 | -      | -     |
|                              | Limit      | uW/MHz | 25.023   | 48.098   | 33.083   | -      | -     |
|                              | 5270.0 to  | uW/MHz | 0.039    | 0.037    | 0.041    | Pass   | -     |
|                              | 5278.4 MHz | MHz    | 5278.170 | 5272.070 | 5274.180 | -      | -     |
|                              | Limit      | uW/MHz | 2.563    | 5.953    | 4.448    | -      | -     |
|                              | 5278.4 to  | uW/MHz | 0.052    | 0.059    | 0.056    | Pass   | -     |
|                              | 5400.0 MHz | MHz    | 5355.370 | 5337.010 | 5348.080 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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G4B(www.g4b.go.kr)진위확인코드 : keqzWxQdI30=



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| Channel Number                                          |            | ch.    | 38        |           |           | Result | Limit |
|---------------------------------------------------------|------------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |            | MHz    | 5190      |           |           |        |       |
| Voltage                                                 |            | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Out-Band<br>Leakage<br>Power<br>(Sum)                   | 5100.0 to  | uW/MHz | 0.328     | 0.280     | 0.265     | Pass   | -     |
|                                                         | 5141.6 MHz | MHz    | 5141.39   | 5141.23   | 5141.52   | -      | -     |
|                                                         | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
|                                                         | 5141.6 to  | uW/MHz | 0.741     | 0.653     | 0.696     | Pass   | -     |
|                                                         | 5150.0 MHz | MHz    | 5149.88   | 5149.92   | 5149.97   | -      | -     |
|                                                         | Limit      | uW/MHz | 15.000    | 15.000    | 15.000    | -      | -     |
|                                                         | 5250.0 to  | uW/MHz | 0.183     | 0.186     | 0.177     | Pass   | -     |
|                                                         | 5251.0 MHz | MHz    | 5250.80   | 5250.99   | 5250.54   | -      | -     |
|                                                         | Limit      | uW/MHz | 79.245    | 51.165    | 144.202   | -      | -     |
|                                                         | 5251.0 to  | uW/MHz | 0.202     | 0.191     | 0.178     | Pass   | -     |
|                                                         | 5270.0 MHz | MHz    | 5260.86   | 5254.61   | 5256.97   | -      | -     |
|                                                         | Limit      | uW/MHz | 19.223    | 35.235    | 28.029    | -      | -     |
|                                                         | 5270.0 to  | uW/MHz | 0.153     | 0.148     | 0.145     | Pass   | -     |
|                                                         | 5278.4 MHz | MHz    | 5278.17   | 5276.45   | 5274.18   | -      | -     |
|                                                         | Limit      | uW/MHz | 2.563     | 3.251     | 4.448     | -      | -     |
|                                                         | 5278.4 to  | uW/MHz | 0.267     | 0.266     | 0.255     | Pass   | -     |
|                                                         | 5400.0 MHz | MHz    | 5361.33   | 5345.04   | 5348.08   | -      | -     |
|                                                         | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx0) | 30 to      | nW     | 0.423     | 0.264     | 0.279     | Pass   | ≤ 4   |
|                                                         | 1000 MHz   | MHz    | 56.19     | 56.19     | 56.19     | -      | -     |
|                                                         | 1000 to    | nW     | 0.063     | 0.059     | 0.065     | Pass   | ≤ 20  |
|                                                         | 10000 MHz  | MHz    | 3 619.00  | 3 619.00  | 7 237.00  | -      | -     |
|                                                         | 10000 to   | nW     | 0.048     | 0.044     | 0.043     | Pass   | ≤ 20  |
|                                                         | 26000 MHz  | MHz    | 24 400.00 | 23 744.00 | 21 536.00 | -      | -     |

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# TEST REPORT



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| Channel Number                                          |           | ch. | 38        |           |           | Result | Limit    |
|---------------------------------------------------------|-----------|-----|-----------|-----------|-----------|--------|----------|
| Measurement Frequency                                   |           | MHz | 5190      |           |           |        |          |
| Voltage                                                 |           | Vdc | 10.80     | 12.00     | 13.20     | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx1) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 1 000.00  | 544.10    | 1 000.00  | -      | -        |
|                                                         | 1000 to   | nW  | 0.038     | 0.032     | 0.032     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.043     | 0.044     | 0.046     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 23 792.00 | 23 552.00 | 25 904.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx2) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 118.27    | 882.63    | 798.24    | -      | -        |
|                                                         | 1000 to   | nW  | 0.027     | 0.030     | 0.031     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.049     | 0.057     | 0.054     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 25 472.00 | 22 400.00 | 23 392.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx3) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 798.24    | 925.31    | 65.89     | -      | -        |
|                                                         | 1000 to   | nW  | 0.015     | 0.018     | 0.015     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 691.00  | 2 674.00  | 3 718.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.054     | 0.069     | 0.046     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 25 520.00 | 25 760.00 | 25 856.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Sum) | 30 to     | nW  | 0.426     | 0.266     | 0.282     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | -         | -         | -         | -      | -        |
|                                                         | 1000 to   | nW  | 0.143     | 0.138     | 0.143     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | -         | -         | -         | -      | -        |
|                                                         | 10000 to  | nW  | 0.194     | 0.215     | 0.190     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | -         | -         | -         | -      | -        |
| Burst Length of Transmitted Signals                     |           |     | Good      | Good      | Good      | Pass   | ≤ 8 ms   |
| Carrier Sensing Function                                |           |     | Good      | Good      | Good      | Pass   | 100 mV/m |
| Interference Prevention Function                        |           |     | Good      |           |           | Pass   | -        |

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G4B(www.g4b.go.kr)진위확인코드 : keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                      |  |
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## 4.3.3.2. Middle Channel

| Channel Number               | ch.    | 46       |          |          | Result | Limit      |
|------------------------------|--------|----------|----------|----------|--------|------------|
| Measurement Frequency        | MHz    | 5230     |          |          |        |            |
| Voltage                      | Vdc    | 10.80    | 12.00    | 13.20    | -      | -          |
| Frequency Measurements (Tx0) | MHz    | 5 229.97 | 5 229.97 | 5 229.97 | -      | -          |
| Frequency Tolerance (Tx0)    | ppm    | -5.796   | -5.794   | -5.792   | Pass   | ± 20       |
| Frequency Measurements (Tx1) | MHz    | 5 229.97 | 5 229.97 | 5 229.97 | -      | -          |
| Frequency Tolerance (Tx1)    | ppm    | -5.853   | -5.840   | -5.833   | Pass   | ± 20       |
| Frequency Measurements (Tx2) | MHz    | 5 229.97 | 5 229.97 | 5 229.97 | -      | -          |
| Frequency Tolerance (Tx2)    | ppm    | -6.040   | -6.029   | -6.021   | Pass   | ± 20       |
| Frequency Measurements (Tx3) | MHz    | 5 229.97 | 5 229.97 | 5 229.97 | -      | -          |
| Frequency Tolerance (Tx3)    | ppm    | -6.090   | -6.076   | -6.071   | Pass   | ± 20       |
| Occupied Bandwidth (Tx0)     | MHz    | 36.360   | 36.340   | 36.390   | Pass   | ≤ 40       |
| Occupied Bandwidth (Tx1)     | MHz    | 36.260   | 36.250   | 36.330   | Pass   | ≤ 40       |
| Occupied Bandwidth (Tx2)     | MHz    | 36.220   | 36.240   | 36.320   | Pass   | ≤ 40       |
| Occupied Bandwidth (Tx3)     | MHz    | 36.370   | 36.310   | 36.380   | Pass   | ≤ 40       |
| RF Output Power (Tx0)        | mW/MHz | 0.786    | 0.776    | 0.800    | Pass   | ≤ 5.0      |
| RF Output Power (Tx1)        | mW/MHz | 0.642    | 0.636    | 0.625    | Pass   | ≤ 5.0      |
| RF Output Power (Tx2)        | mW/MHz | 0.723    | 0.716    | 0.712    | Pass   | ≤ 5.0      |
| RF Output Power (Tx3)        | mW/MHz | 0.633    | 0.632    | 0.626    | Pass   | ≤ 5.0      |
| RF Output Power (Sum)        | mW/MHz | 2.785    | 2.761    | 2.764    | Pass   | ≤ 5.0      |
| RF Output Power Tolerance    | %      | -7.15    | -7.96    | -7.87    | Pass   | +20 to -80 |
| E.I.R.P. (Tx0)               | mW/MHz | 1.246    | 1.230    | 1.268    | Pass   | ≤ 5.0      |
| E.I.R.P. (Tx1)               | mW/MHz | 1.018    | 1.009    | 0.991    | Pass   | ≤ 5.0      |
| E.I.R.P. (Tx2)               | mW/MHz | 1.147    | 1.135    | 1.129    | Pass   | ≤ 5.0      |
| E.I.R.P. (Tx3)               | mW/MHz | 1.004    | 1.002    | 0.993    | Pass   | ≤ 5.0      |
| E.I.R.P. (Sum)               | mW/MHz | 4.415    | 4.376    | 4.381    | Pass   | ≤ 5.0      |

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G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드 : keqzWxQdI30=

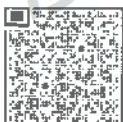


# TEST REPORT

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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|

| Channel Number                                          |           | ch.    | 46       |          |          | Result | Limit |
|---------------------------------------------------------|-----------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency                                   |           | MHz    | 5230     |          |          |        |       |
| Voltage                                                 |           | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx0) | 30 to     | uW/MHz | 0.048    | 0.048    | 0.046    | Pass   | ≤ 2.5 |
|                                                         | 5100 MHz  | MHz    | 5 075.15 | 5 080.26 | 5 064.93 | -      | -     |
|                                                         | 5400 to   | uW/MHz | 0.296    | 0.248    | 0.450    | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 5 278.40 | 5 278.40 | 5 278.40 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx1) | 30 to     | uW/MHz | 0.038    | 0.045    | 0.037    | Pass   | ≤ 2.5 |
|                                                         | 5100 MHz  | MHz    | 5 070.04 | 5 080.26 | 5 080.26 | -      | -     |
|                                                         | 5400 to   | uW/MHz | 0.237    | 0.399    | 0.238    | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 5 278.40 | 5 278.40 | 5 278.40 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx2) | 30 to     | uW/MHz | 0.214    | 0.302    | 0.034    | Pass   | ≤ 2.5 |
|                                                         | 5100 MHz  | MHz    | 832.52   | 832.52   | 5 054.70 | -      | -     |
|                                                         | 5400 to   | uW/MHz | 0.624    | 0.231    | 0.499    | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 5 278.40 | 5 278.40 | 5 278.40 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx3) | 30 to     | uW/MHz | 0.037    | 0.039    | 0.039    | Pass   | ≤ 2.5 |
|                                                         | 5100 MHz  | MHz    | 5 075.15 | 5 085.37 | 5 141.60 | -      | -     |
|                                                         | 5400 to   | uW/MHz | 0.397    | 0.472    | 0.259    | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 5 278.40 | 5 278.40 | 5 278.40 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Sum) | 30 to     | uW/MHz | 0.337    | 0.433    | 0.156    | Pass   | ≤ 2.5 |
|                                                         | 5100 MHz  | MHz    | -        | -        | -        | -      | -     |
|                                                         | 5400 to   | uW/MHz | 1.554    | 1.349    | 1.446    | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | -        | -        | -        | -      | -     |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx0)           | cf        | dB     | 21.93    | 21.83    | 21.96    | -      | -     |
|                                                         | -40 MHz   | dB     | -40.03   | -40.22   | -40.42   | Pass   | ≤-25  |
|                                                         | 40 MHz    | dB     | -39.21   | -38.99   | -39.21   | Pass   | ≤-25  |
|                                                         | -80 MHz   | dB     | -51.21   | -51.21   | -51.34   | Pass   | ≤-40  |
|                                                         | 80 MHz    | dB     | -51.15   | -51.04   | -51.24   | Pass   | ≤-40  |

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# TEST REPORT



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| Channel Number                                |         | ch. | 46     |        |        | Result | Limit |
|-----------------------------------------------|---------|-----|--------|--------|--------|--------|-------|
| Measurement Frequency                         |         | MHz | 5230   |        |        |        |       |
| Voltage                                       |         | Vdc | 10.80  | 12.00  | 13.20  | -      | -     |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx1) | cf      | dB  | 20.77  | 20.76  | 20.70  | -      | -     |
|                                               | -40 MHz | dB  | -41.40 | -41.54 | -41.51 | Pass   | ≤-25  |
|                                               | 40 MHz  | dB  | -40.36 | -40.36 | -39.90 | Pass   | ≤-25  |
|                                               | -80 MHz | dB  | -51.60 | -51.48 | -51.45 | Pass   | ≤-40  |
|                                               | 80 MHz  | dB  | -51.04 | -51.03 | -51.07 | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx2) | cf      | dB  | 21.52  | 21.52  | 21.58  | -      | -     |
|                                               | -40 MHz | dB  | -41.53 | -41.47 | -41.40 | Pass   | ≤-25  |
|                                               | 40 MHz  | dB  | -39.57 | -39.56 | -39.56 | Pass   | ≤-25  |
|                                               | -80 MHz | dB  | -52.36 | -52.28 | -52.43 | Pass   | ≤-40  |
|                                               | 80 MHz  | dB  | -50.38 | -50.26 | -50.33 | Pass   | ≤-40  |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx3) | cf      | dB  | 20.89  | 20.92  | 20.95  | -      | -     |
|                                               | -40 MHz | dB  | -40.00 | -40.00 | -40.27 | Pass   | ≤-25  |
|                                               | 40 MHz  | dB  | -38.94 | -39.13 | -39.15 | Pass   | ≤-25  |
|                                               | -80 MHz | dB  | -50.95 | -50.99 | -50.99 | Pass   | ≤-40  |
|                                               | 80 MHz  | dB  | -50.96 | -51.03 | -51.05 | Pass   | ≤-40  |

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# TEST REPORT

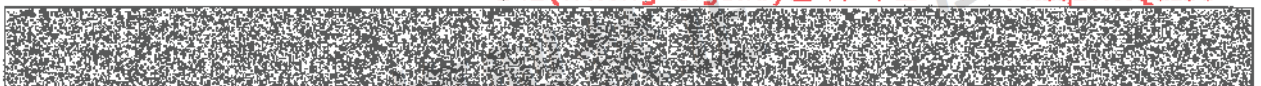
|                                                                                                                                                                                                                                                                                  |                                                           |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 46       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5230     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx0) | 5100.0 to  | uW/MHz | 0.025    | 0.032    | 0.029    | Pass   | -     |
|                                    | 5141.6 MHz | MHz    | 5 139.02 | 5 139.89 | 5 138.69 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5141.6 to  | uW/MHz | 0.033    | 0.033    | 0.032    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 146.39 | 5 141.74 | 5 148.50 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 45.594   | 45.664   | 45.837   | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.00 | 5 250.00 | 5 250.00 | -      | -     |
|                                    | Limit      | uW/MHz | 500.000  | 500.000  | 500.000  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 9.112    | 5.535    | 7.811    | Pass   | -     |
|                                    | 5270.0 MHz | MHz    | 5 251.82 | 5 251.00 | 5 251.15 | -      | -     |
|                                    | Limit      | uW/MHz | 46.179   | 50.000   | 49.278   | -      | -     |
|                                    | 5270.0 to  | uW/MHz | 0.422    | 0.428    | 0.483    | Pass   | -     |
|                                    | 5278.4 MHz | MHz    | 5273.130 | 5270.060 | 5273.010 | -      | -     |
|                                    | Limit      | uW/MHz | 5.142    | 7.859    | 5.228    | -      | -     |
|                                    | 5278.4 to  | uW/MHz | 0.122    | 0.112    | 0.133    | Pass   | -     |
|                                    | 5400.0 MHz | MHz    | 5279.980 | 5278.400 | 5280.470 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT



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 Korea  
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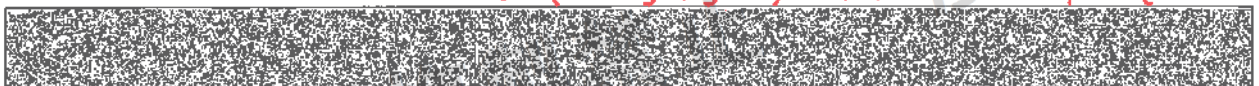
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| Channel Number                     |            | ch.    | 46       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5230     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx1) | 5100.0 to  | uW/MHz | 0.026    | 0.024    | 0.025    | Pass   | -     |
|                                    | 5141.6 MHz | MHz    | 5 141.35 | 5 139.69 | 5 135.65 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5141.6 to  | uW/MHz | 0.036    | 0.033    | 0.029    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 145.82 | 5 147.70 | 5 144.05 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 46.840   | 41.872   | 47.234   | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.05 | 5 250.04 | 5 250.03 | -      | -     |
|                                    | Limit      | uW/MHz | 445.625  | 456.005  | 466.627  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 6.181    | 4.513    | 5.057    | Pass   | -     |
|                                    | 5270.0 MHz | MHz    | 5 251.04 | 5 251.02 | 5 251.14 | -      | -     |
|                                    | Limit      | uW/MHz | 49.806   | 49.903   | 49.326   | -      | -     |
|                                    | 5270.0 to  | uW/MHz | 0.396    | 0.460    | 0.422    | Pass   | -     |
|                                    | 5278.4 MHz | MHz    | 5271.520 | 5273.440 | 5273.000 | -      | -     |
|                                    | Limit      | uW/MHz | 6.423    | 4.927    | 5.236    | -      | -     |
|                                    | 5278.4 to  | uW/MHz | 0.147    | 0.154    | 0.119    | Pass   | -     |
|                                    | 5400.0 MHz | MHz    | 5279.250 | 5278.400 | 5278.640 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                  |                                                                                     |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 46       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5230     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx2) | 5100.0 to  | uW/MHz | 0.023    | 0.026    | 0.022    | Pass   | -     |
|                                    | 5141.6 MHz | MHz    | 5 141.39 | 5 136.82 | 5 137.81 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5141.6 to  | uW/MHz | 0.034    | 0.032    | 0.029    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 146.33 | 5 149.19 | 5 146.62 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 61.593   | 62.507   | 62.538   | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.00 | 5 250.01 | 5 250.01 | -      | -     |
|                                    | Limit      | uW/MHz | 500.000  | 488.619  | 488.619  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 6.531    | 7.299    | 7.078    | Pass   | -     |
|                                    | 5270.0 MHz | MHz    | 5 252.56 | 5 251.02 | 5 251.02 | -      | -     |
|                                    | Limit      | uW/MHz | 42.982   | 49.903   | 49.903   | -      | -     |
|                                    | 5270.0 to  | uW/MHz | 1.106    | 0.660    | 0.748    | Pass   | -     |
|                                    | 5278.4 MHz | MHz    | 5270.180 | 5270.000 | 5272.430 | -      | -     |
|                                    | Limit      | uW/MHz | 7.730    | 7.924    | 5.665    | -      | -     |
|                                    | 5278.4 to  | uW/MHz | 0.256    | 0.192    | 0.148    | Pass   | -     |
|                                    | 5400.0 MHz | MHz    | 5279.130 | 5279.740 | 5278.640 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT



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Korea  
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複製禁止

| Channel Number                     |            | ch.    | 46       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5230     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx3) | 5100.0 to  | uW/MHz | 0.035    | 0.040    | 0.035    | Pass   | -     |
|                                    | 5141.6 MHz | MHz    | 5 137.11 | 5 141.52 | 5 140.89 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5141.6 to  | uW/MHz | 0.045    | 0.058    | 0.048    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 147.43 | 5 143.10 | 5 146.60 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 69.765   | 70.644   | 68.767   | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.01 | 5 250.01 | 5 250.03 | -      | -     |
|                                    | Limit      | uW/MHz | 488.619  | 488.619  | 466.627  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 8.046    | 7.945    | 8.052    | Pass   | -     |
|                                    | 5270.0 MHz | MHz    | 5 251.06 | 5 251.53 | 5 251.00 | -      | -     |
|                                    | Limit      | uW/MHz | 49.710   | 47.496   | 50.000   | -      | -     |
|                                    | 5270.0 to  | uW/MHz | 0.780    | 0.952    | 0.702    | Pass   | -     |
|                                    | 5278.4 MHz | MHz    | 5272.540 | 5272.130 | 5270.020 | -      | -     |
|                                    | Limit      | uW/MHz | 5.579    | 5.904    | 7.903    | -      | -     |
|                                    | 5278.4 to  | uW/MHz | 0.195    | 0.255    | 0.198    | Pass   | -     |
|                                    | 5400.0 MHz | MHz    | 5279.250 | 5278.640 | 5278.520 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT



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Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,  
Korea  
Tel: +82-31-333-3220 Fax: +82-31-824-8855

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| Channel Number                                          |            | ch.     | 46        |           |           | Result | Limit |
|---------------------------------------------------------|------------|---------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |            | MHz     | 5230      |           |           |        |       |
| Voltage                                                 |            | Vdc     | 10.80     | 12.00     | 13.20     | -      | -     |
| Out-Band<br>Leakage<br>Power<br>(Sum)                   | 5100.0 to  | uW/MHz  | 0.109     | 0.123     | 0.111     | Pass   | -     |
|                                                         | 5141.6 MHz | MHz     | 5141.39   | 5141.52   | 5140.89   | -      | -     |
|                                                         | Limit      | uW/MHz  | 2.500     | 2.500     | 2.500     | -      | -     |
|                                                         | 5141.6 to  | uW/MHz  | 0.148     | 0.156     | 0.138     | Pass   | -     |
|                                                         | 5150.0 MHz | MHz     | 5147.43   | 5149.19   | 5148.50   | -      | -     |
|                                                         | Limit      | uW/MHz  | 15.000    | 15.000    | 15.000    | -      | -     |
|                                                         | 5250.0 to  | uW/MHz  | 223.792   | 220.687   | 224.376   | Pass   | -     |
|                                                         | 5251.0 MHz | MHz     | 5250.05   | 5250.04   | 5250.03   | -      | -     |
|                                                         | Limit      | uW/MHz  | 445.625   | 456.005   | 466.627   | -      | -     |
|                                                         | 5251.0 to  | uW/MHz  | 29.870    | 25.292    | 27.998    | Pass   | -     |
|                                                         | 5270.0 MHz | MHz     | 5252.56   | 5251.53   | 5251.15   | -      | -     |
|                                                         | Limit      | uW/MHz  | 42.982    | 47.496    | 49.278    | -      | -     |
|                                                         | 5270.0 to  | uW/MHz  | 2.704     | 2.500     | 2.355     | Pass   | -     |
|                                                         | 5278.4 MHz | MHz     | 5273.13   | 5273.44   | 5273.01   | -      | -     |
|                                                         | Limit      | uW/MHz  | 5.142     | 4.927     | 5.228     | -      | -     |
|                                                         | 5278.4 to  | uW/MHz  | 0.720     | 0.714     | 0.598     | Pass   | -     |
| 5400.0 MHz                                              | MHz        | 5279.98 | 5279.74   | 5280.47   | -         | -      |       |
| Limit                                                   | uW/MHz     | 2.500   | 2.500     | 2.500     | -         | -      |       |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx0) | 30 to      | nW      | 0.298     | 0.259     | 0.425     | Pass   | ≤ 4   |
|                                                         | 1000 MHz   | MHz     | 55.22     | 56.19     | 56.19     | -      | -     |
|                                                         | 1000 to    | nW      | 0.059     | 0.067     | 0.059     | Pass   | ≤ 20  |
|                                                         | 10000 MHz  | MHz     | 7 237.00  | 3 619.00  | 3 619.00  | -      | -     |
|                                                         | 10000 to   | nW      | 0.040     | 0.043     | 0.043     | Pass   | ≤ 20  |
|                                                         | 26000 MHz  | MHz     | 25 552.00 | 23 552.00 | 25 296.00 | -      | -     |

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# TEST REPORT

|                                                                                                                   |                                                                                                                                                                                                |                                                           |                                                                                     |
|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------|
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|-------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|-------------------------------------------------------------------------------------|

| Channel Number                                          |           | ch. | 46        |           |           | Result | Limit       |
|---------------------------------------------------------|-----------|-----|-----------|-----------|-----------|--------|-------------|
| Measurement Frequency                                   |           | MHz | 5230      |           |           |        |             |
| Voltage                                                 |           | Vdc | 10.80     | 12.00     | 13.20     | -      | -           |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx1) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4         |
|                                                         | 1000 MHz  | MHz | 142.52    | 1 000.00  | 1 000.00  | -      | -           |
|                                                         | 1000 to   | nW  | 0.038     | 0.032     | 0.030     | Pass   | ≤ 20        |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -           |
|                                                         | 10000 to  | nW  | 0.048     | 0.059     | 0.052     | Pass   | ≤ 20        |
|                                                         | 26000 MHz | MHz | 19 216.00 | 25 520.00 | 25 136.00 | -      | -           |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx2) | 30 to     | nW  | 0.074     | 0.001     | 0.001     | Pass   | ≤ 4         |
|                                                         | 1000 MHz  | MHz | 904.94    | 876.81    | 154.16    | -      | -           |
|                                                         | 1000 to   | nW  | 0.030     | 0.029     | 0.031     | Pass   | ≤ 20        |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -           |
|                                                         | 10000 to  | nW  | 0.042     | 0.063     | 0.051     | Pass   | ≤ 20        |
|                                                         | 26000 MHz | MHz | 23 232.00 | 25 520.00 | 23 968.00 | -      | -           |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx3) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4         |
|                                                         | 1000 MHz  | MHz | 537.31    | 112.45    | 903.00    | -      | -           |
|                                                         | 1000 to   | nW  | 0.015     | 0.014     | 0.014     | Pass   | ≤ 20        |
|                                                         | 10000 MHz | MHz | 3 727.00  | 7 417.00  | 3 718.00  | -      | -           |
|                                                         | 10000 to  | nW  | 0.045     | 0.040     | 0.057     | Pass   | ≤ 20        |
|                                                         | 26000 MHz | MHz | 24 240.00 | 24 496.00 | 25 808.00 | -      | -           |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Sum) | 30 to     | nW  | 0.373     | 0.261     | 0.427     | Pass   | ≤ 4         |
|                                                         | 1000 MHz  | MHz | -         | -         | -         | -      | -           |
|                                                         | 1000 to   | nW  | 0.142     | 0.141     | 0.134     | Pass   | ≤ 20        |
|                                                         | 10000 MHz | MHz | -         | -         | -         | -      | -           |
|                                                         | 10000 to  | nW  | 0.175     | 0.205     | 0.204     | Pass   | ≤ 20        |
|                                                         | 26000 MHz | MHz | -         | -         | -         | -      | -           |
| Burst Length of Transmitted Signals                     |           |     | Good      | Good      | Good      | Pass   | ≤ 8 ms      |
| Carrier Sensing Function                                |           |     | Good      | Good      | Good      | Pass   | 100<br>mV/m |
| Interference Prevention Function                        |           |     | Good      |           |           | Pass   | -           |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-6855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (83) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|

## 4.4. 802.11ac (VHT20)

### 4.4.1. Duty cycle

|            |          |       |    |
|------------|----------|-------|----|
| Duty Cycle | On       | 0.168 | ms |
|            | Off      | 0.028 | ms |
|            | On + Off | 0.196 | ms |
|            | Ratio    | 85.6  | %  |

### 4.4.2. Declaration RF Output Power

|                       |       |         |
|-----------------------|-------|---------|
| Declaration RF Output | 5     | mW/MHz  |
| Power                 | 6.990 | dBm/MHz |
| E.I.R.P.              | 9.537 | mW/MHz  |
|                       | 8.990 | dBm/MHz |

### 4.4.3. Test Result

#### 4.4.3.1. Lowest Channel

| Channel Number               | ch. | 36       |          |          | Result | Limit |
|------------------------------|-----|----------|----------|----------|--------|-------|
| Measurement Frequency        | MHz | 5180     |          |          |        |       |
| Voltage                      | Vdc | 10.80    | 12.00    | 13.20    | -      | -     |
| Frequency Measurements (Tx0) | MHz | 5 179.94 | 5 179.94 | 5 179.94 | -      | -     |
| Frequency Tolerance (Tx0)    | ppm | -10.751  | -10.822  | -10.860  | Pass   | ± 20  |
| Frequency Measurements (Tx1) | MHz | 5 179.94 | 5 179.94 | 5 179.94 | -      | -     |
| Frequency Tolerance (Tx1)    | ppm | -11.331  | -11.298  | -11.250  | Pass   | ± 20  |
| Frequency Measurements (Tx2) | MHz | 5 179.95 | 5 179.95 | 5 179.95 | -      | -     |
| Frequency Tolerance (Tx2)    | ppm | -10.113  | -10.038  | -9.934   | Pass   | ± 20  |
| Frequency Measurements (Tx3) | MHz | 5 179.95 | 5 179.95 | 5 179.95 | -      | -     |
| Frequency Tolerance (Tx3)    | ppm | -10.557  | -10.496  | -10.415  | Pass   | ± 20  |
| Occupied Bandwidth (Tx0)     | MHz | 17.920   | 17.940   | 17.920   | Pass   | ≤ 20  |
| Occupied Bandwidth (Tx1)     | MHz | 17.870   | 17.930   | 17.900   | Pass   | ≤ 20  |
| Occupied Bandwidth (Tx2)     | MHz | 17.940   | 17.930   | 17.870   | Pass   | ≤ 20  |
| Occupied Bandwidth (Tx3)     | MHz | 17.890   | 17.890   | 17.970   | Pass   | ≤ 20  |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드 : keqzWxQdI30=



# TEST REPORT



**SongDam Certification Center**  
 #708, Creation Hall, Yongin Songdam College, 61  
 Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,  
 Korea  
 Tel: +82-31-333-3220 Fax: +82-31-624-8855

Report No.:  
 SDCC-2020-00128  
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| Channel Number                                          |           | ch.    | 36        |           |           | Result | Limit      |
|---------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|------------|
| Measurement Frequency                                   |           | MHz    | 5180      |           |           |        |            |
| Voltage                                                 |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -          |
| RF Output Power (Tx0)                                   |           | mW/MHz | 1.013     | 1.086     | 1.015     | Pass   | ≤ 10.0     |
| RF Output Power (Tx1)                                   |           | mW/MHz | 1.498     | 1.490     | 1.474     | Pass   | ≤ 10.0     |
| RF Output Power (Tx2)                                   |           | mW/MHz | 1.711     | 1.638     | 1.592     | Pass   | ≤ 10.0     |
| RF Output Power (Tx3)                                   |           | mW/MHz | 1.367     | 1.344     | 1.336     | Pass   | ≤ 10.0     |
| RF Output Power (Sum)                                   |           | mW/MHz | 5.589     | 5.558     | 5.417     | Pass   | ≤ 10.0     |
| RF Output Power Tolerance                               |           | %      | 11.79     | 11.17     | 8.33      | Pass   | +20 to -80 |
| E.I.R.P. (Tx0)                                          |           | mW/MHz | 1.605     | 1.721     | 1.609     | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx1)                                          |           | mW/MHz | 2.374     | 2.362     | 2.336     | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx2)                                          |           | mW/MHz | 2.712     | 2.597     | 2.522     | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx3)                                          |           | mW/MHz | 2.167     | 2.130     | 2.117     | Pass   | ≤ 10.0     |
| E.I.R.P. (Sum)                                          |           | mW/MHz | 8.858     | 8.809     | 8.585     | Pass   | ≤ 10.0     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx0) | 30 to     | uW/MHz | 0.042     | 0.041     | 0.043     | Pass   | ≤ 2.5      |
|                                                         | 5135 MHz  | MHz    | 5 099.27  | 5 141.55  | 5 124.79  | -      | -          |
|                                                         | 5365 to   | uW/MHz | 0.201     | 0.176     | 0.186     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 24 307.93 | 24 988.89 | 24 617.46 | -      | -          |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx1) | 30 to     | uW/MHz | 0.045     | 0.046     | 0.041     | Pass   | ≤ 2.5      |
|                                                         | 5135 MHz  | MHz    | 5 138.03  | 5 140.68  | 5 135.00  | -      | -          |
|                                                         | 5365 to   | uW/MHz | 0.170     | 0.173     | 0.215     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 23 998.41 | 24 080.95 | 24 266.66 | -      | -          |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx2) | 30 to     | uW/MHz | 0.043     | 0.038     | 0.036     | Pass   | ≤ 2.5      |
|                                                         | 5135 MHz  | MHz    | 5 135.00  | 5 124.79  | 5 135.00  | -      | -          |
|                                                         | 5365 to   | uW/MHz | 0.204     | 0.168     | 0.172     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 24 988.89 | 24 947.62 | 24 287.30 | -      | -          |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx3) | 30 to     | uW/MHz | 0.076     | 0.076     | 0.067     | Pass   | ≤ 2.5      |
|                                                         | 5135 MHz  | MHz    | 5 104.37  | 5 104.37  | 5 104.37  | -      | -          |
|                                                         | 5365 to   | uW/MHz | 0.158     | 0.211     | 0.199     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 24 638.09 | 24 638.09 | 24 968.25 | -      | -          |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드 : keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                           |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|
|  <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br>SDCC-2020-00128<br>Page (85) / (135) pages |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|

| Channel Number                                          |           | ch.    | 36     |        |        | Result | Limit |
|---------------------------------------------------------|-----------|--------|--------|--------|--------|--------|-------|
| Measurement Frequency                                   |           | MHz    | 5180   |        |        |        |       |
| Voltage                                                 |           | Vdc    | 10.80  | 12.00  | 13.20  | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Sum) | 30 to     | uW/MHz | 0.205  | 0.201  | 0.187  | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | -      | -      | -      | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.732  | 0.727  | 0.773  | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | -      | -      | -      | -      | -     |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx0)           | cf        | dB     | 20.34  | 20.34  | 20.29  | -      | -     |
|                                                         | -20 MHz   | dB     | -31.94 | -32.02 | -31.74 | Pass   | ≤ -25 |
|                                                         | 20 MHz    | dB     | -31.23 | -31.57 | -31.84 | Pass   | ≤ -25 |
|                                                         | -40 MHz   | dB     | -52.59 | -52.52 | -52.53 | Pass   | ≤ -40 |
|                                                         | 40 MHz    | dB     | -51.79 | -51.78 | -51.73 | Pass   | ≤ -40 |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx1)           | cf        | dB     | 21.41  | 21.48  | 21.46  | -      | -     |
|                                                         | -20 MHz   | dB     | -32.20 | -32.17 | -32.34 | Pass   | ≤ -25 |
|                                                         | 20 MHz    | dB     | -31.64 | -31.05 | -32.22 | Pass   | ≤ -25 |
|                                                         | -40 MHz   | dB     | -53.01 | -52.61 | -52.56 | Pass   | ≤ -40 |
|                                                         | 40 MHz    | dB     | -52.19 | -51.87 | -51.90 | Pass   | ≤ -40 |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx2)           | cf        | dB     | 21.49  | 21.47  | 21.40  | -      | -     |
|                                                         | -20 MHz   | dB     | -31.89 | -31.91 | -31.67 | Pass   | ≤ -25 |
|                                                         | 20 MHz    | dB     | -32.17 | -31.76 | -32.11 | Pass   | ≤ -25 |
|                                                         | -40 MHz   | dB     | -52.65 | -52.66 | -52.64 | Pass   | ≤ -40 |
|                                                         | 40 MHz    | dB     | -51.75 | -51.72 | -51.68 | Pass   | ≤ -40 |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx3)           | cf        | dB     | 21.37  | 21.29  | 21.33  | -      | -     |
|                                                         | -20 MHz   | dB     | -31.67 | -31.69 | -31.75 | Pass   | ≤ -25 |
|                                                         | 20 MHz    | dB     | -31.87 | -31.73 | -31.82 | Pass   | ≤ -25 |
|                                                         | -40 MHz   | dB     | -52.39 | -52.36 | -52.37 | Pass   | ≤ -40 |
|                                                         | 40 MHz    | dB     | -52.04 | -51.97 | -51.99 | Pass   | ≤ -40 |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

|                                                                                   |                                                                                                                                                                                                |                                                           |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|
|  | <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br>SDCC-2020-00128<br>Page (88) / (135) pages |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 36       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5180     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx0) | 5135.0 to  | uW/MHz | 0.042    | 0.041    | 0.041    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 138.40 | 5 141.55 | 5 136.51 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.091    | 0.081    | 0.072    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.91 | 5 149.84 | 5 149.55 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.040    | 0.040    | 0.047    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.60 | 5 250.06 | 5 250.71 | -      | -     |
|                                    | Limit      | uW/MHz | 251.189  | 870.964  | 194.984  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.046    | 0.045    | 0.045    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 251.59 | 5 259.22 | 5 254.10 | -      | -     |
|                                    | Limit      | uW/MHz | 88.625   | 18.592   | 53.021   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.044    | 0.039    | 0.040    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5261.950 | 5260.940 | 5260.270 | -      | -     |
|                                    | Limit      | uW/MHz | 9.247    | 12.224   | 14.710   | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.030    | 0.030    | 0.028    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5267.980 | 5268.670 | 5266.900 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)

G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (87) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 36       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5180     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx1) | 5135.0 to  | uW/MHz | 0.045    | 0.046    | 0.036    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 138.03 | 5 140.68 | 5 139.21 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.063    | 0.066    | 0.067    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.46 | 5 148.78 | 5 149.94 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.040    | 0.037    | 0.036    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.56 | 5 250.97 | 5 250.90 | -      | -     |
|                                    | Limit      | uW/MHz | 275.423  | 107.152  | 125.893  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.041    | 0.040    | 0.039    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 259.76 | 5 253.43 | 5 253.39 | -      | -     |
|                                    | Limit      | uW/MHz | 16.647   | 60.814   | 61.313   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.036    | 0.045    | 0.034    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5266.000 | 5262.430 | 5264.610 | -      | -     |
|                                    | Limit      | uW/MHz | 3.020    | 8.098    | 4.434    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.026    | 0.030    | 0.026    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5266.900 | 5267.190 | 5267.090 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)

G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                           |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|
|  <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-824-8855 | Report No.:<br>SDCC-2020-00128<br>Page (88) / (135) pages |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 36       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5180     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx2) | 5135.0 to  | uW/MHz | 0.040    | 0.041    | 0.041    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 140.77 | 5 136.27 | 5 140.30 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.095    | 0.090    | 0.083    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.63 | 5 149.79 | 5 149.94 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.041    | 0.044    | 0.044    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.88 | 5 250.45 | 5 250.91 | -      | -     |
|                                    | Limit      | uW/MHz | 131.826  | 354.813  | 123.027  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.060    | 0.051    | 0.058    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 252.45 | 5 253.84 | 5 252.61 | -      | -     |
|                                    | Limit      | uW/MHz | 74.321   | 55.919   | 71.926   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.051    | 0.050    | 0.044    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 264.84 | 5 262.05 | 5 261.01 | -      | -     |
|                                    | Limit      | uW/MHz | 4.161    | 8.995    | 11.989   | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.037    | 0.046    | 0.039    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 268.27 | 5 266.70 | 5 267.19 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                      |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/>         SDCC-2020-00128<br/>         Page (89) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 36       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5180     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx3) | 5135.0 to  | uW/MHz | 0.060    | 0.055    | 0.054    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 139.45 | 5 139.30 | 5 139.00 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.165    | 0.138    | 0.128    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.74 | 5 149.74 | 5 149.48 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.054    | 0.053    | 0.055    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.09 | 5 250.87 | 5 250.46 | -      | -     |
|                                    | Limit      | uW/MHz | 812.831  | 134.896  | 346.737  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.086    | 0.067    | 0.060    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 253.33 | 5 254.98 | 5 256.06 | -      | -     |
|                                    | Limit      | uW/MHz | 62.071   | 44.281   | 35.499   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.065    | 0.055    | 0.063    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 266.57 | 5 261.87 | 5 262.19 | -      | -     |
|                                    | Limit      | uW/MHz | 2.580    | 9.454    | 8.654    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.047    | 0.043    | 0.051    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 267.78 | 5 268.37 | 5 266.80 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT



**SongDam Certification Center**  
#708, Creation Hall, Yongin Songdam College, 61  
Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,  
Korea  
Tel: +82-31-333-3220 Fax: +82-31-624-8855

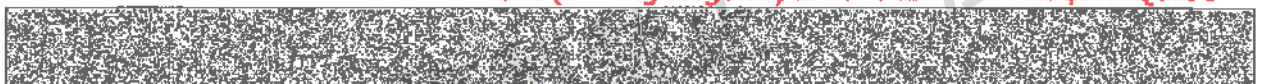
Report No.:  
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| Channel Number                              |            | ch.    | 36        |           |           | Result | Limit |
|---------------------------------------------|------------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                       |            | MHz    | 5180      |           |           |        |       |
| Voltage                                     |            | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Out-Band Leakage Power (Sum)                | 5135.0 to  | uW/MHz | 0.186     | 0.183     | 0.171     | Pass   | -     |
|                                             | 5142.0 MHz | MHz    | 5140.770  | 5141.550  | 5140.300  | -      | -     |
|                                             | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
|                                             | 5142.0 to  | uW/MHz | 0.414     | 0.376     | 0.349     | Pass   | -     |
|                                             | 5150.0 MHz | MHz    | 5149.910  | 5149.840  | 5149.940  | -      | -     |
|                                             | Limit      | uW/MHz | 15.000    | 15.000    | 15.000    | -      | -     |
|                                             | 5250.0 to  | uW/MHz | 0.175     | 0.174     | 0.182     | Pass   | -     |
|                                             | 5251.0 MHz | MHz    | 5250.880  | 5250.970  | 5250.910  | -      | -     |
|                                             | Limit      | uW/MHz | 131.826   | 107.152   | 123.027   | -      | -     |
|                                             | 5251.0 to  | uW/MHz | 0.233     | 0.203     | 0.202     | Pass   | -     |
|                                             | 5260.0 MHz | MHz    | 5259.760  | 5259.220  | 5256.060  | -      | -     |
|                                             | Limit      | uW/MHz | 16.647    | 18.592    | 35.499    | -      | -     |
|                                             | 5260.0 to  | uW/MHz | 0.196     | 0.189     | 0.181     | Pass   | -     |
|                                             | 5266.7 MHz | MHz    | 5266.570  | 5262.430  | 5264.610  | -      | -     |
|                                             | Limit      | uW/MHz | 2.580     | 8.098     | 4.434     | -      | -     |
|                                             | 5266.7 to  | uW/MHz | 0.140     | 0.148     | 0.144     | Pass   | -     |
|                                             | 5365.0 MHz | MHz    | 5268.270  | 5268.670  | 5267.190  | -      | -     |
|                                             | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
| Secondary emitted radio wave strength (Tx0) | 30 to      | nW     | 0.283     | 0.314     | 0.309     | Pass   | ≤ 4   |
|                                             | 1000 MHz   | MHz    | 56.19     | 56.19     | 56.19     | -      | -     |
|                                             | 1000 to    | nW     | 0.056     | 0.069     | 0.062     | Pass   | ≤ 20  |
|                                             | 10000 MHz  | MHz    | 3 619.00  | 3 619.00  | 3 619.00  | -      | -     |
|                                             | 10000 to   | nW     | 0.062     | 0.064     | 0.074     | Pass   | ≤ 20  |
|                                             | 26000 MHz  | MHz    | 24 992.00 | 25 808.00 | 24 704.00 | -      | -     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |
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|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (91) / (135) pages</p> |
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| Channel Number                                          |           | ch. | 36        |           |           | Result | Limit    |
|---------------------------------------------------------|-----------|-----|-----------|-----------|-----------|--------|----------|
| Measurement Frequency                                   |           | MHz | 5180      |           |           |        |          |
| Voltage                                                 |           | Vdc | 10.80     | 12.00     | 13.20     | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx1) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 267.65    | 1 000.00  | 876.81    | -      | -        |
|                                                         | 1000 to   | nW  | 0.035     | 0.034     | 0.029     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.069     | 0.074     | 0.064     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 25 584.00 | 24 368.00 | 24 240.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx2) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 965.08    | 394.72    | 782.72    | -      | -        |
|                                                         | 1000 to   | nW  | 0.033     | 0.030     | 0.031     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.087     | 0.062     | 0.096     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 23 696.00 | 24 944.00 | 23 920.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx3) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 58.13     | 101.78    | 254.07    | -      | -        |
|                                                         | 1000 to   | nW  | 0.016     | 0.015     | 0.017     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 5 941.00  | 2 647.00  | 6 256.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.062     | 0.066     | 0.070     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 23 760.00 | 19 296.00 | 24 096.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Sum) | 30 to     | nW  | 0.285     | 0.316     | 0.311     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | -         | -         | -         | -      | -        |
|                                                         | 1000 to   | nW  | 0.141     | 0.148     | 0.139     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | -         | -         | -         | -      | -        |
|                                                         | 10000 to  | nW  | 0.279     | 0.266     | 0.305     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | -         | -         | -         | -      | -        |
| Burst Length of Transmitted Signals                     |           |     | Good      | Good      | Good      | Pass   | ≤ 8 ms   |
| Carrier Sensing Function                                |           |     | Good      | Good      | Good      | Pass   | 100 mV/m |
| Interference Prevention Function                        |           |     | Good      |           |           | Pass   | -        |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                                  |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------------|--|
|  <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8655 | Report No.:<br><b>SDCC-2020-00128</b><br>Page (82) / (135) pages |  |
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## 4.4.3.2. Middle Channel

| Channel Number               | ch.    | 40       |          |          | Result | Limit      |
|------------------------------|--------|----------|----------|----------|--------|------------|
| Measurement Frequency        | MHz    | 5200     |          |          |        |            |
| Voltage                      | Vdc    | 10.80    | 12.00    | 13.20    | -      | -          |
| Frequency Measurements (Tx0) | MHz    | 5 199.94 | 5 199.94 | 5 199.94 | -      | -          |
| Frequency Tolerance (Tx0)    | ppm    | -11.016  | -11.009  | -11.048  | Pass   | ± 20       |
| Frequency Measurements (Tx1) | MHz    | 5 199.94 | 5 199.94 | 5 199.94 | -      | -          |
| Frequency Tolerance (Tx1)    | ppm    | -11.204  | -11.215  | -11.222  | Pass   | ± 20       |
| Frequency Measurements (Tx2) | MHz    | 5 199.95 | 5 199.95 | 5 199.95 | -      | -          |
| Frequency Tolerance (Tx2)    | ppm    | -10.324  | -10.284  | -10.209  | Pass   | ± 20       |
| Frequency Measurements (Tx3) | MHz    | 5 199.95 | 5 199.95 | 5 199.95 | -      | -          |
| Frequency Tolerance (Tx3)    | ppm    | -10.407  | -10.349  | -10.264  | Pass   | ± 20       |
| Occupied Bandwidth (Tx0)     | MHz    | 17.930   | 17.920   | 17.940   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx1)     | MHz    | 17.870   | 17.870   | 17.920   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx2)     | MHz    | 17.930   | 17.880   | 17.880   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx3)     | MHz    | 17.880   | 17.930   | 17.860   | Pass   | ≤ 20       |
| RF Output Power (Tx0)        | mW/MHz | 0.387    | 0.363    | 0.367    | Pass   | ≤ 10.0     |
| RF Output Power (Tx1)        | mW/MHz | 0.676    | 0.669    | 0.662    | Pass   | ≤ 10.0     |
| RF Output Power (Tx2)        | mW/MHz | 0.438    | 0.429    | 0.429    | Pass   | ≤ 10.0     |
| RF Output Power (Tx3)        | mW/MHz | 0.665    | 0.632    | 0.628    | Pass   | ≤ 10.0     |
| RF Output Power (Sum)        | mW/MHz | 2.165    | 2.093    | 2.086    | Pass   | ≤ 10.0     |
| RF Output Power Tolerance    | %      | -56.69   | -58.13   | -58.27   | Pass   | +20 to -80 |
| E.I.R.P. (Tx0)               | mW/MHz | 0.613    | 0.576    | 0.582    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx1)               | mW/MHz | 1.071    | 1.061    | 1.049    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx2)               | mW/MHz | 0.694    | 0.679    | 0.680    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx3)               | mW/MHz | 1.054    | 1.001    | 0.995    | Pass   | ≤ 10.0     |
| E.I.R.P. (Sum)               | mW/MHz | 3.432    | 3.318    | 3.307    | Pass   | ≤ 10.0     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                           |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------|--|

| Channel Number                                          |           | ch.    | 40        |           |           | Result | Limit |
|---------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |           | MHz    | 5200      |           |           |        |       |
| Voltage                                                 |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx0) | 30 to     | uW/MHz | 0.024     | 0.024     | 0.027     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 5 124.79  | 2 551.87  | 5 119.69  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.191     | 0.176     | 0.183     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 349.20 | 23 647.61 | 24 947.62 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx1) | 30 to     | uW/MHz | 0.019     | 0.018     | 0.021     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 5 119.69  | 3 664.76  | 3 144.05  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.219     | 0.186     | 0.165     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 947.62 | 25 566.67 | 24 947.62 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx2) | 30 to     | uW/MHz | 0.019     | 0.022     | 0.021     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 3 715.81  | 2 679.50  | 3 705.60  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.189     | 0.178     | 0.197     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 968.25 | 24 638.09 | 24 390.47 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx3) | 30 to     | uW/MHz | 0.029     | 0.029     | 0.030     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 5 119.69  | 5 124.79  | 5 135.00  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.171     | 0.233     | 0.184     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 576.19 | 24 369.84 | 24 369.84 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Sum) | 30 to     | uW/MHz | 0.091     | 0.093     | 0.098     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | -         | -         | -         | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.770     | 0.773     | 0.729     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | -         | -         | -         | -      | -     |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx0)           | cf        | dB     | 16.05     | 15.99     | 16.06     | -      | -     |
|                                                         | -20 MHz   | dB     | -32.00    | -31.89    | -32.29    | Pass   | ≤-25  |
|                                                         | 20 MHz    | dB     | -31.28    | -31.16    | -31.64    | Pass   | ≤-25  |
|                                                         | -40 MHz   | dB     | -52.67    | -52.57    | -52.63    | Pass   | ≤-40  |
|                                                         | 40 MHz    | dB     | -51.52    | -51.48    | -51.54    | Pass   | ≤-40  |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                      |  |
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|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-6855</p> | <p>Report No.:<br/>         SDCC-2020-00128<br/>         Page (94) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|

| Channel Number                       |         | ch. | 40     |        |        | Result | Limit |
|--------------------------------------|---------|-----|--------|--------|--------|--------|-------|
| Measurement Frequency                |         | MHz | 5200   |        |        |        |       |
| Voltage                              |         | Vdc | 10.80  | 12.00  | 13.20  | -      | -     |
| Adjacent Channel Leakage Power (Tx1) | cf      | dB  | 18.19  | 18.25  | 18.22  | -      | -     |
|                                      | -20 MHz | dB  | -32.25 | -32.41 | -32.38 | Pass   | ≤-25  |
|                                      | 20 MHz  | dB  | -31.11 | -31.24 | -30.72 | Pass   | ≤-25  |
|                                      | -40 MHz | dB  | -53.02 | -53.08 | -52.99 | Pass   | ≤-40  |
|                                      | 40 MHz  | dB  | -51.59 | -51.69 | -51.64 | Pass   | ≤-40  |
| Adjacent Channel Leakage Power (Tx2) | cf      | dB  | 16.03  | 16.04  | 16.00  | -      | -     |
|                                      | -20 MHz | dB  | -32.48 | -32.49 | -32.43 | Pass   | ≤-25  |
|                                      | 20 MHz  | dB  | -31.69 | -31.98 | -31.80 | Pass   | ≤-25  |
|                                      | -40 MHz | dB  | -52.95 | -52.91 | -52.97 | Pass   | ≤-40  |
|                                      | 40 MHz  | dB  | -51.59 | -51.57 | -51.57 | Pass   | ≤-40  |
| Adjacent Channel Leakage Power (Tx3) | cf      | dB  | 18.24  | 18.15  | 18.12  | -      | -     |
|                                      | -20 MHz | dB  | -32.29 | -32.07 | -32.24 | Pass   | ≤-25  |
|                                      | 20 MHz  | dB  | -32.14 | -31.67 | -31.85 | Pass   | ≤-25  |
|                                      | -40 MHz | dB  | -52.60 | -52.51 | -52.55 | Pass   | ≤-40  |
|                                      | 40 MHz  | dB  | -52.08 | -51.97 | -51.99 | Pass   | ≤-40  |

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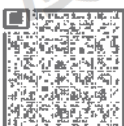


# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                |                                                                                     |  |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheon, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (95) / (135) pages</p> |  |
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| Channel Number                     |            | ch.    | 40       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5200     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx0) | 5135.0 to  | uW/MHz | 0.013    | 0.013    | 0.012    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 136.55 | 5 138.56 | 5 140.85 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.015    | 0.014    | 0.015    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 144.20 | 5 146.04 | 5 143.99 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.020    | 0.019    | 0.020    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.99 | 5 250.58 | 5 250.50 | -      | -     |
|                                    | Limit      | uW/MHz | 102.329  | 263.027  | 316.228  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.020    | 0.027    | 0.020    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 256.28 | 5 256.70 | 5 255.86 | -      | -     |
|                                    | Limit      | uW/MHz | 33.936   | 31.141   | 36.983   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.019    | 0.019    | 0.017    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5260.400 | 5263.090 | 5263.880 | -      | -     |
|                                    | Limit      | uW/MHz | 14.191   | 6.748    | 5.425    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.019    | 0.019    | 0.023    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5275.150 | 5281.840 | 5279.770 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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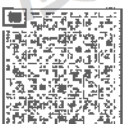
# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                     |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-824-8855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (96) / (135) pages</p> |  |
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| Channel Number                     |            | ch.    | 40       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5200     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx1) | 5135.0 to  | uW/MHz | 0.015    | 0.015    | 0.014    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 138.30 | 5 141.71 | 5 139.93 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.015    | 0.018    | 0.016    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 147.10 | 5 145.97 | 5 144.61 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.026    | 0.026    | 0.028    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.56 | 5 250.76 | 5 250.79 | -      | -     |
|                                    | Limit      | uW/MHz | 275.423  | 173.780  | 162.181  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.031    | 0.036    | 0.026    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 256.52 | 5 253.73 | 5 255.35 | -      | -     |
|                                    | Limit      | uW/MHz | 32.310   | 57.192   | 41.052   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.024    | 0.024    | 0.026    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5260.640 | 5260.290 | 5263.320 | -      | -     |
|                                    | Limit      | uW/MHz | 13.280   | 14.629   | 6.333    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.025    | 0.025    | 0.021    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5273.680 | 5277.020 | 5281.050 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT



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 Korea  
 Tel: +82-31-333-3220 Fax: +82-31-624-8855

Report No.:  
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| Channel Number                     |            | ch.    | 40       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5200     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx2) | 5135.0 to  | uW/MHz | 0.013    | 0.011    | 0.010    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 139.63 | 5 141.26 | 5 141.42 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.013    | 0.012    | 0.013    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.97 | 5 144.11 | 5 148.17 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.020    | 0.018    | 0.022    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.60 | 5 250.84 | 5 250.69 | -      | -     |
|                                    | Limit      | uW/MHz | 251.189  | 144.544  | 204.174  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.020    | 0.022    | 0.019    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 255.68 | 5 256.25 | 5 257.69 | -      | -     |
|                                    | Limit      | uW/MHz | 38.371   | 34.145   | 25.429   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.018    | 0.018    | 0.017    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 261.30 | 5 265.94 | 5 262.63 | -      | -     |
|                                    | Limit      | uW/MHz | 11.066   | 3.070    | 7.663    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.018    | 0.019    | 0.018    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 288.62 | 5 281.64 | 5 287.05 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                      |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoln, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/>         SDCC-2020-00128<br/>         Page (98) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 40       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5200     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx3) | 5135.0 to  | uW/MHz | 0.025    | 0.022    | 0.024    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 139.12 | 5 135.88 | 5 135.93 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.026    | 0.027    | 0.026    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 144.02 | 5 144.74 | 5 142.82 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.031    | 0.032    | 0.031    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.03 | 5 250.68 | 5 250.54 | -      | -     |
|                                    | Limit      | uW/MHz | 933.254  | 208.930  | 288.403  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.035    | 0.029    | 0.034    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 256.07 | 5 255.81 | 5 256.00 | -      | -     |
|                                    | Limit      | uW/MHz | 35.427   | 37.363   | 35.938   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.027    | 0.027    | 0.028    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 264.05 | 5 260.13 | 5 260.63 | -      | -     |
|                                    | Limit      | uW/MHz | 5.176    | 15.290   | 13.317   | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.027    | 0.024    | 0.028    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 276.63 | 5 277.12 | 5 267.49 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

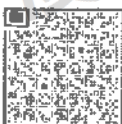


**SongDam Certification Center**  
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 Korea  
 Tel: +82-31-333-3220 Fax: +82-31-624-8855

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| Channel Number                                          |            | ch.    | 40        |           |           | Result | Limit |
|---------------------------------------------------------|------------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |            | MHz    | 5200      |           |           |        |       |
| Voltage                                                 |            | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Out-Band<br>Leakage<br>Power<br>(Sum)                   | 5135.0 to  | uW/MHz | 0.065     | 0.061     | 0.061     | Pass   | -     |
|                                                         | 5142.0 MHz | MHz    | 5139.630  | 5141.710  | 5141.420  | -      | -     |
|                                                         | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
|                                                         | 5142.0 to  | uW/MHz | 0.069     | 0.070     | 0.071     | Pass   | -     |
|                                                         | 5150.0 MHz | MHz    | 5149.970  | 5146.040  | 5148.170  | -      | -     |
|                                                         | Limit      | uW/MHz | 15.000    | 15.000    | 15.000    | -      | -     |
|                                                         | 5250.0 to  | uW/MHz | 0.097     | 0.095     | 0.101     | Pass   | -     |
|                                                         | 5251.0 MHz | MHz    | 5250.990  | 5250.840  | 5250.790  | -      | -     |
|                                                         | Limit      | uW/MHz | 102.329   | 144.544   | 162.181   | -      | -     |
|                                                         | 5251.0 to  | uW/MHz | 0.106     | 0.114     | 0.099     | Pass   | -     |
|                                                         | 5260.0 MHz | MHz    | 5256.520  | 5256.700  | 5257.690  | -      | -     |
|                                                         | Limit      | uW/MHz | 32.310    | 31.141    | 25.429    | -      | -     |
|                                                         | 5260.0 to  | uW/MHz | 0.088     | 0.088     | 0.088     | Pass   | -     |
|                                                         | 5266.7 MHz | MHz    | 5264.050  | 5265.940  | 5263.880  | -      | -     |
|                                                         | Limit      | uW/MHz | 5.176     | 3.070     | 5.425     | -      | -     |
|                                                         | 5266.7 to  | uW/MHz | 0.088     | 0.087     | 0.090     | Pass   | -     |
|                                                         | 5365.0 MHz | MHz    | 5288.620  | 5281.840  | 5287.050  | -      | -     |
|                                                         | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx0) | 30 to      | nW     | 0.332     | 0.300     | 0.293     | Pass   | ≤ 4   |
|                                                         | 1000 MHz   | MHz    | 56.19     | 56.19     | 57.16     | -      | -     |
|                                                         | 1000 to    | nW     | 0.061     | 0.057     | 0.067     | Pass   | ≤ 20  |
|                                                         | 10000 MHz  | MHz    | 3 619.00  | 3 619.00  | 3 619.00  | -      | -     |
|                                                         | 10000 to   | nW     | 0.057     | 0.084     | 0.061     | Pass   | ≤ 20  |
|                                                         | 26000 MHz  | MHz    | 21 488.00 | 25 520.00 | 24 976.00 | -      | -     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                                   |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|

| Channel Number                                          |           | ch. | 40        |           |           | Result | Limit    |
|---------------------------------------------------------|-----------|-----|-----------|-----------|-----------|--------|----------|
| Measurement Frequency                                   |           | MHz | 5200      |           |           |        |          |
| Voltage                                                 |           | Vdc | 10.80     | 12.00     | 13.20     | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx1) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 253.10    | 1 000.00  | 818.61    | -      | -        |
|                                                         | 1000 to   | nW  | 0.031     | 0.036     | 0.031     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.068     | 0.070     | 0.076     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 23 856.00 | 24 944.00 | 25 824.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx2) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 186.17    | 241.46    | 881.66    | -      | -        |
|                                                         | 1000 to   | nW  | 0.031     | 0.030     | 0.030     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.067     | 0.047     | 0.070     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 24 016.00 | 25 568.00 | 25 584.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx3) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 517.91    | 61.04     | 957.32    | -      | -        |
|                                                         | 1000 to   | nW  | 0.015     | 0.015     | 0.016     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 9 991.00  | 6 211.00  | 2 980.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.068     | 0.068     | 0.063     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 23 888.00 | 25 760.00 | 25 568.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Sum) | 30 to     | nW  | 0.334     | 0.302     | 0.294     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | -         | -         | -         | -      | -        |
|                                                         | 1000 to   | nW  | 0.138     | 0.138     | 0.143     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | -         | -         | -         | -      | -        |
|                                                         | 10000 to  | nW  | 0.260     | 0.269     | 0.270     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | -         | -         | -         | -      | -        |
| Burst Length of Transmitted Signals                     |           |     | Good      | Good      | Good      | Pass   | ≤ 8 ms   |
| Carrier Sensing Function                                |           |     | Good      | Good      | Good      | Pass   | 100 mV/m |
| Interference Prevention Function                        |           |     | Good      |           |           | Pass   | -        |

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# TEST REPORT

|                                                                                   |                                                                                                                                                                                                |                                                            |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|
|  | <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br>SDCC-2020-00128<br>Page (101) / (135) pages |  |
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## 4.4.3.3. Highest Channel

| Channel Number               | ch.    | 48       |          |          | Result | Limit      |
|------------------------------|--------|----------|----------|----------|--------|------------|
| Measurement Frequency        | MHz    | 5240     |          |          |        |            |
| Voltage                      | Vdc    | 10.80    | 12.00    | 13.20    | -      | -          |
| Frequency Measurements (Tx0) | MHz    | 5 239.94 | 5 239.94 | 5 239.94 | -      | -          |
| Frequency Tolerance (Tx0)    | ppm    | -11.142  | -11.147  | -11.161  | Pass   | ± 20       |
| Frequency Measurements (Tx1) | MHz    | 5 239.94 | 5 239.94 | 5 239.94 | -      | -          |
| Frequency Tolerance (Tx1)    | ppm    | -11.242  | -11.208  | -11.159  | Pass   | ± 20       |
| Frequency Measurements (Tx2) | MHz    | 5 239.95 | 5 239.95 | 5 239.95 | -      | -          |
| Frequency Tolerance (Tx2)    | ppm    | -10.277  | -10.249  | -10.194  | Pass   | ± 20       |
| Frequency Measurements (Tx3) | MHz    | 5 239.95 | 5 239.95 | 5 239.95 | -      | -          |
| Frequency Tolerance (Tx3)    | ppm    | -10.322  | -10.270  | -10.225  | Pass   | ± 20       |
| Occupied Bandwidth (Tx0)     | MHz    | 17.900   | 17.920   | 17.900   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx1)     | MHz    | 17.890   | 17.940   | 17.910   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx2)     | MHz    | 17.920   | 17.900   | 17.960   | Pass   | ≤ 20       |
| Occupied Bandwidth (Tx3)     | MHz    | 17.930   | 17.930   | 17.930   | Pass   | ≤ 20       |
| RF Output Power (Tx0)        | mW/MHz | 1.118    | 1.094    | 1.099    | Pass   | ≤ 10.0     |
| RF Output Power (Tx1)        | mW/MHz | 1.572    | 1.550    | 1.554    | Pass   | ≤ 10.0     |
| RF Output Power (Tx2)        | mW/MHz | 1.551    | 1.351    | 1.362    | Pass   | ≤ 10.0     |
| RF Output Power (Tx3)        | mW/MHz | 1.467    | 1.275    | 1.252    | Pass   | ≤ 10.0     |
| RF Output Power (Sum)        | mW/MHz | 5.708    | 5.270    | 5.267    | Pass   | ≤ 10.0     |
| RF Output Power Tolerance    | %      | 14.15    | 5.40     | 5.35     | Pass   | +20 to -80 |
| E.I.R.P. (Tx0)               | mW/MHz | 1.771    | 1.734    | 1.742    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx1)               | mW/MHz | 2.492    | 2.456    | 2.462    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx2)               | mW/MHz | 2.459    | 2.141    | 2.159    | Pass   | ≤ 10.0     |
| E.I.R.P. (Tx3)               | mW/MHz | 2.325    | 2.021    | 1.984    | Pass   | ≤ 10.0     |
| E.I.R.P. (Sum)               | mW/MHz | 9.046    | 8.352    | 8.348    | Pass   | ≤ 10.0     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                      |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (102) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|

| Channel Number                                          |           | ch.    | 48        |           |           | Result | Limit |
|---------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |           | MHz    | 5240      |           |           |        |       |
| Voltage                                                 |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx0) | 30 to     | uW/MHz | 0.024     | 0.023     | 0.023     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 5 073.74  | 5 073.74  | 5 140.10  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.175     | 0.163     | 0.178     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 23 647.61 | 25 587.30 | 24 328.57 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx1) | 30 to     | uW/MHz | 0.024     | 0.022     | 0.022     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 5 083.95  | 3 164.47  | 5 078.85  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.167     | 0.188     | 0.184     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 968.25 | 25 009.52 | 24 369.84 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx2) | 30 to     | uW/MHz | 0.023     | 0.022     | 0.022     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 5 135.00  | 5 058.43  | 5 083.95  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.189     | 0.169     | 0.163     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 266.66 | 24 369.84 | 24 926.98 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx3) | 30 to     | uW/MHz | 0.029     | 0.026     | 0.039     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | 5 073.74  | 5 083.95  | 5 089.06  | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.181     | 0.191     | 0.197     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 349.20 | 24 390.47 | 24 968.25 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Sum) | 30 to     | uW/MHz | 0.099     | 0.093     | 0.105     | Pass   | ≤ 2.5 |
|                                                         | 5135 MHz  | MHz    | -         | -         | -         | -      | -     |
|                                                         | 5365 to   | uW/MHz | 0.711     | 0.711     | 0.722     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | -         | -         | -         | -      | -     |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx0)           | cf        | dB     | 20.57     | 20.68     | 20.53     | -      | -     |
|                                                         | -20 MHz   | dB     | -31.68    | -31.70    | -31.31    | Pass   | ≤-25  |
|                                                         | 20 MHz    | dB     | -31.64    | -31.64    | -31.12    | Pass   | ≤-25  |
|                                                         | -40 MHz   | dB     | -52.30    | -52.45    | -52.31    | Pass   | ≤-40  |
|                                                         | 40 MHz    | dB     | -51.99    | -52.08    | -52.00    | Pass   | ≤-40  |

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# TEST REPORT

|                                                                                   |                                                                                                                                                                                                |                                                            |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|
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|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|

| Channel Number                       |         | ch. | 48     |        |        | Result | Limit |
|--------------------------------------|---------|-----|--------|--------|--------|--------|-------|
| Measurement Frequency                |         | MHz | 5240   |        |        |        |       |
| Voltage                              |         | Vdc | 10.80  | 12.00  | 13.20  | -      | -     |
| Adjacent Channel Leakage Power (Tx1) | cf      | dB  | 21.71  | 21.81  | 21.75  | -      | -     |
|                                      | -20 MHz | dB  | -32.03 | -31.87 | -31.87 | Pass   | ≤-25  |
|                                      | 20 MHz  | dB  | -31.32 | -31.36 | -31.89 | Pass   | ≤-25  |
|                                      | -40 MHz | dB  | -52.33 | -52.38 | -52.33 | Pass   | ≤-40  |
|                                      | 40 MHz  | dB  | -51.90 | -52.08 | -51.94 | Pass   | ≤-40  |
| Adjacent Channel Leakage Power (Tx2) | cf      | dB  | 21.62  | 21.54  | 21.50  | -      | -     |
|                                      | -20 MHz | dB  | -32.06 | -32.15 | -31.79 | Pass   | ≤-25  |
|                                      | 20 MHz  | dB  | -31.93 | -31.60 | -31.86 | Pass   | ≤-25  |
|                                      | -40 MHz | dB  | -52.85 | -52.81 | -52.76 | Pass   | ≤-40  |
|                                      | 40 MHz  | dB  | -51.92 | -51.90 | -51.85 | Pass   | ≤-40  |
| Adjacent Channel Leakage Power (Tx3) | cf      | dB  | 21.25  | 21.29  | 21.29  | -      | -     |
|                                      | -20 MHz | dB  | -31.59 | -31.66 | -31.89 | Pass   | ≤-25  |
|                                      | 20 MHz  | dB  | -31.67 | -31.52 | -31.69 | Pass   | ≤-25  |
|                                      | -40 MHz | dB  | -52.89 | -52.34 | -52.86 | Pass   | ≤-40  |
|                                      | 40 MHz  | dB  | -52.59 | -52.08 | -52.69 | Pass   | ≤-40  |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                  |                                                                                      |  |
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|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongsin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (104) / (135) pages</p> |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 48        |           |           | Result | Limit |
|------------------------------------|------------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5240      |           |           |        |       |
| Voltage                            |            | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx0) | 5135.0 to  | uW/MHz | 0.021     | 0.020     | 0.023     | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 139.40  | 5 140.31  | 5 140.10  | -      | -     |
|                                    | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.021     | 0.021     | 0.021     | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.67  | 5 143.73  | 5 148.20  | -      | -     |
|                                    | Limit      | uW/MHz | 15.000    | 15.000    | 15.000    | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 1.146     | 2.177     | 1.646     | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.00  | 5 250.00  | 5 250.00  | -      | -     |
|                                    | Limit      | uW/MHz | 1 000.000 | 1 000.000 | 1 000.000 | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.131     | 0.126     | 0.134     | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 251.05  | 5 251.04  | 5 251.03  | -      | -     |
|                                    | Limit      | uW/MHz | 98.982    | 99.185    | 99.388    | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 1.083     | 0.960     | 1.071     | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5260.500  | 5260.350  | 5260.090  | -      | -     |
|                                    | Limit      | uW/MHz | 13.804    | 14.388    | 15.460    | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.119     | 0.111     | 0.128     | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5267.190  | 5266.990  | 5266.700  | -      | -     |
|                                    | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |



# TEST REPORT

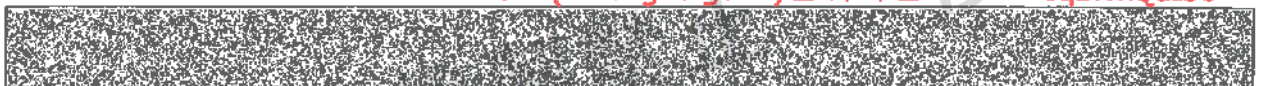
|                                                                                   |                                                                                                                                                                                                |                                                            |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|
|  | <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-824-8855 | Report No.:<br>SDCC-2020-00128<br>Page (105) / (135) pages |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 48       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5240     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx1) | 5135.0 to  | uW/MHz | 0.019    | 0.017    | 0.018    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 141.45 | 5 139.04 | 5 137.29 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.023    | 0.023    | 0.024    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 146.58 | 5 145.28 | 5 146.07 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 1.676    | 1.065    | 1.261    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.02 | 5 250.01 | 5 250.07 | -      | -     |
|                                    | Limit      | uW/MHz | 954.993  | 977.237  | 851.138  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.141    | 0.126    | 0.125    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 251.00 | 5 251.00 | 5 251.05 | -      | -     |
|                                    | Limit      | uW/MHz | 100.000  | 100.000  | 98.982   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 0.891    | 0.917    | 0.872    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5260.030 | 5260.070 | 5260.050 | -      | -     |
|                                    | Limit      | uW/MHz | 15.718   | 15.545   | 15.631   | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.159    | 0.114    | 0.155    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5267.090 | 5268.760 | 5268.170 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

|                                                                                   |                                                                                                                                                                                                |                                                            |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|
|  | <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-824-8855 | Report No.:<br>SDCC-2020-00128<br>Page (106) / (135) pages |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 48       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5240     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx2) | 5135.0 to  | uW/MHz | 0.018    | 0.018    | 0.016    | Pass   | -     |
|                                    | 5142.0 MHz | MHz    | 5 140.43 | 5 140.98 | 5 141.41 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5142.0 to  | uW/MHz | 0.019    | 0.020    | 0.021    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.76 | 5 148.14 | 5 146.26 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 1.192    | 1.684    | 1.337    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.08 | 5 250.02 | 5 250.09 | -      | -     |
|                                    | Limit      | uW/MHz | 831.764  | 954.993  | 812.831  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.105    | 0.117    | 0.160    | Pass   | -     |
|                                    | 5260.0 MHz | MHz    | 5 251.10 | 5 251.00 | 5 251.01 | -      | -     |
|                                    | Limit      | uW/MHz | 97.974   | 100.000  | 99.796   | -      | -     |
|                                    | 5260.0 to  | uW/MHz | 1.093    | 1.290    | 1.080    | Pass   | -     |
|                                    | 5266.7 MHz | MHz    | 5 260.38 | 5 260.31 | 5 260.01 | -      | -     |
|                                    | Limit      | uW/MHz | 14.269   | 14.548   | 15.805   | -      | -     |
|                                    | 5266.7 to  | uW/MHz | 0.125    | 0.128    | 0.147    | Pass   | -     |
|                                    | 5365.0 MHz | MHz    | 5 268.86 | 5 268.67 | 5 267.49 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |



# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|

| Channel Number               |            | ch.    | 48       |          |          | Result | Limit |
|------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency        |            | MHz    | 5240     |          |          |        |       |
| Voltage                      |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band Leakage Power (Tx3) | 5135.0 to  | uW/MHz | 0.029    | 0.024    | 0.025    | Pass   | -     |
|                              | 5142.0 MHz | MHz    | 5 136.51 | 5 139.26 | 5 138.66 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                              | 5142.0 to  | uW/MHz | 0.027    | 0.029    | 0.030    | Pass   | -     |
|                              | 5150.0 MHz | MHz    | 5 149.42 | 5 149.60 | 5 149.18 | -      | -     |
|                              | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                              | 5250.0 to  | uW/MHz | 1.455    | 1.536    | 1.646    | Pass   | -     |
|                              | 5251.0 MHz | MHz    | 5 250.03 | 5 250.04 | 5 250.01 | -      | -     |
|                              | Limit      | uW/MHz | 933.254  | 912.011  | 977.237  | -      | -     |
|                              | 5251.0 to  | uW/MHz | 0.096    | 0.133    | 0.115    | Pass   | -     |
|                              | 5260.0 MHz | MHz    | 5 251.10 | 5 251.06 | 5 251.09 | -      | -     |
|                              | Limit      | uW/MHz | 97.974   | 98.779   | 98.175   | -      | -     |
|                              | 5260.0 to  | uW/MHz | 1.588    | 1.702    | 1.858    | Pass   | -     |
|                              | 5266.7 MHz | MHz    | 5 260.01 | 5 260.09 | 5 260.14 | -      | -     |
|                              | Limit      | uW/MHz | 15.805   | 15.460   | 15.248   | -      | -     |
|                              | 5266.7 to  | uW/MHz | 0.159    | 0.161    | 0.211    | Pass   | -     |
|                              | 5365.0 MHz | MHz    | 5 267.68 | 5 267.19 | 5 266.70 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

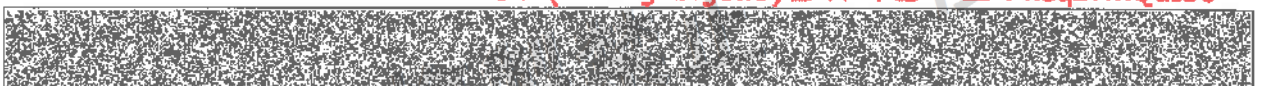
|                                                                                                                                                                                                                                                                                  |                                                                   |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|
|  <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-824-8855 | Report No.:<br><b>SDCC-2020-00128</b><br>Page (108) / (135) pages |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|

| Channel Number                                          |            | ch.    | 48        |           |           | Result | Limit |
|---------------------------------------------------------|------------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |            | MHz    | 5240      |           |           |        |       |
| Voltage                                                 |            | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Out-Band<br>Leakage<br>Power<br>(Sum)                   | 5135.0 to  | uW/MHz | 0.087     | 0.078     | 0.082     | Pass   | -     |
|                                                         | 5142.0 MHz | MHz    | 5141.450  | 5140.980  | 5141.410  | -      | -     |
|                                                         | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
|                                                         | 5142.0 to  | uW/MHz | 0.091     | 0.093     | 0.096     | Pass   | -     |
|                                                         | 5150.0 MHz | MHz    | 5149.760  | 5149.600  | 5149.180  | -      | -     |
|                                                         | Limit      | uW/MHz | 15.000    | 15.000    | 15.000    | -      | -     |
|                                                         | 5250.0 to  | uW/MHz | 5.469     | 6.462     | 5.889     | Pass   | -     |
|                                                         | 5251.0 MHz | MHz    | 5250.080  | 5250.040  | 5250.090  | -      | -     |
|                                                         | Limit      | uW/MHz | 831.764   | 912.011   | 812.831   | -      | -     |
|                                                         | 5251.0 to  | uW/MHz | 0.474     | 0.503     | 0.533     | Pass   | -     |
|                                                         | 5260.0 MHz | MHz    | 5251.100  | 5251.060  | 5251.090  | -      | -     |
|                                                         | Limit      | uW/MHz | 97.974    | 98.779    | 98.175    | -      | -     |
|                                                         | 5260.0 to  | uW/MHz | 4.655     | 4.869     | 4.881     | Pass   | -     |
|                                                         | 5266.7 MHz | MHz    | 5260.500  | 5260.350  | 5260.140  | -      | -     |
|                                                         | Limit      | uW/MHz | 13.804    | 14.388    | 15.248    | -      | -     |
|                                                         | 5266.7 to  | uW/MHz | 0.562     | 0.514     | 0.641     | Pass   | -     |
|                                                         | 5365.0 MHz | MHz    | 5268.860  | 5268.760  | 5268.170  | -      | -     |
|                                                         | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx0) | 30 to      | nW     | 0.398     | 0.224     | 0.306     | Pass   | ≤ 4   |
|                                                         | 1000 MHz   | MHz    | 56.19     | 57.16     | 57.16     | -      | -     |
|                                                         | 1000 to    | nW     | 0.063     | 0.059     | 0.063     | Pass   | ≤ 20  |
|                                                         | 10000 MHz  | MHz    | 3 619.00  | 3 619.00  | 3 619.00  | -      | -     |
|                                                         | 10000 to   | nW     | 0.070     | 0.053     | 0.066     | Pass   | ≤ 20  |
|                                                         | 26000 MHz  | MHz    | 25 792.00 | 25 856.00 | 24 000.00 | -      | -     |

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# TEST REPORT

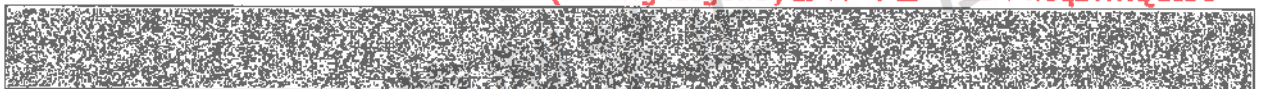
|                                                                                                                                                                                                                                                                                  |                                                                   |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|
|  <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br><b>SDCC-2020-00128</b><br>Page (108) / (135) pages |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|

| Channel Number                                          |           | ch. | 48        |           |           | Result | Limit    |
|---------------------------------------------------------|-----------|-----|-----------|-----------|-----------|--------|----------|
| Measurement Frequency                                   |           | MHz | 5240      |           |           |        |          |
| Voltage                                                 |           | Vdc | 10.80     | 12.00     | 13.20     | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx1) | 30 to     | nW  | 0.001     | 0.002     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 1 000.00  | 96.93     | 107.60    | -      | -        |
|                                                         | 1000 to   | nW  | 0.033     | 0.029     | 0.027     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.061     | 0.051     | 0.070     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 24 976.00 | 24 672.00 | 23 728.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx2) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 878.75    | 884.57    | 846.74    | -      | -        |
|                                                         | 1000 to   | nW  | 0.031     | 0.032     | 0.029     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.058     | 0.070     | 0.058     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 23 824.00 | 23 680.00 | 20 624.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx3) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 901.06    | 884.57    | 415.09    | -      | -        |
|                                                         | 1000 to   | nW  | 0.015     | 0.016     | 0.016     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 2 665.00  | 6 553.00  | 3 727.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.057     | 0.073     | 0.075     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 23 968.00 | 25 552.00 | 24 944.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Sum) | 30 to     | nW  | 0.400     | 0.227     | 0.309     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | -         | -         | -         | -      | -        |
|                                                         | 1000 to   | nW  | 0.141     | 0.136     | 0.134     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | -         | -         | -         | -      | -        |
|                                                         | 10000 to  | nW  | 0.246     | 0.247     | 0.270     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | -         | -         | -         | -      | -        |
| Burst Length of Transmitted Signals                     |           |     | Good      | Good      | Good      | Pass   | ≤ 8 ms   |
| Carrier Sensing Function                                |           |     | Good      | Good      | Good      | Pass   | 100 mV/m |
| Interference Prevention Function                        |           |     | Good      |           |           | Pass   | -        |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/>         SDCC-2020-00128<br/>         Page (110) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|

## 4.5. 802.11ac (VHT40)

### 4.5.1. Duty cycle

|            |          |       |    |
|------------|----------|-------|----|
| Duty Cycle | On       | 0.113 | ms |
|            | Off      | 0.028 | ms |
|            | On + Off | 0.140 | ms |
|            | Ratio    | 80.1  | %  |

### 4.5.2. Declaration RF Output Power

|                       |       |         |
|-----------------------|-------|---------|
| Declaration RF Output | 3     | mW/MHz  |
| Power                 | 4.771 | dBm/MHz |
| E.I.R.P.              | 8.307 | mW/MHz  |
|                       | 6.771 | dBm/MHz |

### 4.5.3. Test Result

#### 4.5.3.1. Lowest Channel

| Channel Number               | ch. | 38       |          |          | Result | Limit |
|------------------------------|-----|----------|----------|----------|--------|-------|
| Measurement Frequency        | MHz | 5190     |          |          |        |       |
| Voltage                      | Vdc | 10.80    | 12.00    | 13.20    | -      | -     |
| Frequency Measurements (Tx0) | MHz | 5 189.97 | 5 189.97 | 5 189.97 | -      | -     |
| Frequency Tolerance (Tx0)    | ppm | -6.245   | -6.227   | -6.214   | Pass   | ± 20  |
| Frequency Measurements (Tx1) | MHz | 5 189.97 | 5 189.97 | 5 189.97 | -      | -     |
| Frequency Tolerance (Tx1)    | ppm | -6.066   | -6.060   | -6.054   | Pass   | ± 20  |
| Frequency Measurements (Tx2) | MHz | 5 189.97 | 5 189.97 | 5 189.97 | -      | -     |
| Frequency Tolerance (Tx2)    | ppm | -5.982   | -5.975   | -5.971   | Pass   | ± 20  |
| Frequency Measurements (Tx3) | MHz | 5 189.97 | 5 189.97 | 5 189.97 | -      | -     |
| Frequency Tolerance (Tx3)    | ppm | -5.982   | -5.983   | -5.973   | Pass   | ± 20  |
| Occupied Bandwidth (Tx0)     | MHz | 36.280   | 36.190   | 36.300   | Pass   | ≤ 40  |
| Occupied Bandwidth (Tx1)     | MHz | 36.280   | 36.310   | 36.380   | Pass   | ≤ 40  |
| Occupied Bandwidth (Tx2)     | MHz | 36.200   | 36.240   | 36.260   | Pass   | ≤ 40  |
| Occupied Bandwidth (Tx3)     | MHz | 36.370   | 36.330   | 36.360   | Pass   | ≤ 40  |

F-TP22-06 (Rev.00)



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# TEST REPORT

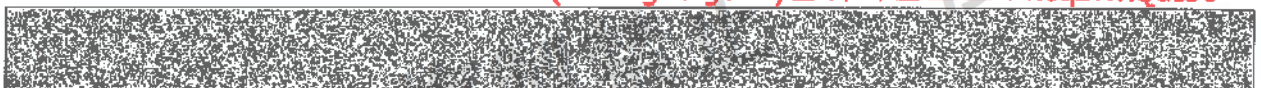
|                                                                                                                                                                                                                                                                                             |                                                                            |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>#708, Creation Hall, Yongin Songdam College, 61<br/>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>Korea<br/>Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/><b>SDCC-2020-00128</b><br/>Page (111) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--|

| Channel Number                                          |           | ch.    | 38        |           |           | Result | Limit      |
|---------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|------------|
| Measurement Frequency                                   |           | MHz    | 5190      |           |           |        |            |
| Voltage                                                 |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -          |
| RF Output Power (Tx0)                                   |           | mW/MHz | 0.420     | 0.445     | 0.430     | Pass   | ≤ 5.0      |
| RF Output Power (Tx1)                                   |           | mW/MHz | 0.522     | 0.522     | 0.513     | Pass   | ≤ 5.0      |
| RF Output Power (Tx2)                                   |           | mW/MHz | 0.523     | 0.513     | 0.515     | Pass   | ≤ 5.0      |
| RF Output Power (Tx3)                                   |           | mW/MHz | 0.729     | 0.718     | 0.642     | Pass   | ≤ 5.0      |
| RF Output Power (Sum)                                   |           | mW/MHz | 2.193     | 2.198     | 2.100     | Pass   | ≤ 5.0      |
| RF Output Power Tolerance                               |           | %      | -26.90    | -26.75    | -29.99    | Pass   | +20 to -80 |
| E.I.R.P. (Tx0)                                          |           | mW/MHz | 0.665     | 0.705     | 0.681     | Pass   | ≤ 5.0      |
| E.I.R.P. (Tx1)                                          |           | mW/MHz | 0.827     | 0.828     | 0.813     | Pass   | ≤ 5.0      |
| E.I.R.P. (Tx2)                                          |           | mW/MHz | 0.828     | 0.813     | 0.816     | Pass   | ≤ 5.0      |
| E.I.R.P. (Tx3)                                          |           | mW/MHz | 1.155     | 1.138     | 1.018     | Pass   | ≤ 5.0      |
| E.I.R.P. (Sum)                                          |           | mW/MHz | 3.476     | 3.483     | 3.329     | Pass   | ≤ 5.0      |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx0) | 30 to     | uW/MHz | 0.022     | 0.021     | 0.022     | Pass   | ≤ 2.5      |
|                                                         | 5100 MHz  | MHz    | 3 168.33  | 2 646.12  | 2 641.05  | -      | -          |
|                                                         | 5400 to   | uW/MHz | 0.153     | 0.171     | 0.160     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 23 610.40 | 24 970.00 | 24 331.40 | -      | -          |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx1) | 30 to     | uW/MHz | 0.029     | 0.028     | 0.031     | Pass   | ≤ 2.5      |
|                                                         | 5100 MHz  | MHz    | 5 039.16  | 5 023.95  | 5 034.09  | -      | -          |
|                                                         | 5400 to   | uW/MHz | 0.164     | 0.208     | 0.188     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 24 352.00 | 24 619.80 | 24 990.60 | -      | -          |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx2) | 30 to     | uW/MHz | 0.022     | 0.025     | 0.022     | Pass   | ≤ 2.5      |
|                                                         | 5100 MHz  | MHz    | 5 034.09  | 5 034.09  | 5 049.30  | -      | -          |
|                                                         | 5400 to   | uW/MHz | 0.171     | 0.187     | 0.154     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 24 970.00 | 24 269.60 | 24 928.80 | -      | -          |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx3) | 30 to     | uW/MHz | 0.040     | 0.030     | 0.037     | Pass   | ≤ 2.5      |
|                                                         | 5100 MHz  | MHz    | 5 034.09  | 5 044.23  | 5 039.16  | -      | -          |
|                                                         | 5400 to   | uW/MHz | 0.183     | 0.160     | 0.213     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 25 608.60 | 24 413.80 | 24 970.00 | -      | -          |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드 : keqzWxQdI30=

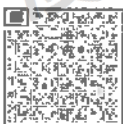


# TEST REPORT

|                                                                                   |                                                                                                                                                                                                |                                                            |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|
|  | <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br>SDCC-2020-00128<br>Page (112) / (135) pages |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|

| Channel Number                                          |           | ch.    | 38     |        |        | Result | Limit |
|---------------------------------------------------------|-----------|--------|--------|--------|--------|--------|-------|
| Measurement Frequency                                   |           | MHz    | 5190   |        |        |        |       |
| Voltage                                                 |           | Vdc    | 10.80  | 12.00  | 13.20  | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Sum) | 30 to     | uW/MHz | 0.113  | 0.104  | 0.111  | Pass   | ≤ 2.5 |
|                                                         | 5100 MHz  | MHz    | -      | -      | -      | -      | -     |
|                                                         | 5400 to   | uW/MHz | 0.670  | 0.725  | 0.715  | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | -      | -      | -      | -      | -     |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx0)           | cf        | dB     | 18.63  | 18.59  | 18.53  | -      | -     |
|                                                         | -40 MHz   | dB     | -43.34 | -43.22 | -43.38 | Pass   | ≤ -25 |
|                                                         | 40 MHz    | dB     | -41.55 | -41.51 | -41.61 | Pass   | ≤ -25 |
|                                                         | -80 MHz   | dB     | -51.56 | -51.52 | -51.91 | Pass   | ≤ -40 |
|                                                         | 80 MHz    | dB     | -49.32 | -49.35 | -49.58 | Pass   | ≤ -40 |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx1)           | cf        | dB     | 19.84  | 19.88  | 19.85  | -      | -     |
|                                                         | -40 MHz   | dB     | -43.76 | -43.84 | -43.67 | Pass   | ≤ -25 |
|                                                         | 40 MHz    | dB     | -41.99 | -41.66 | -41.48 | Pass   | ≤ -25 |
|                                                         | -80 MHz   | dB     | -52.35 | -52.43 | -52.37 | Pass   | ≤ -40 |
|                                                         | 80 MHz    | dB     | -50.37 | -50.47 | -50.41 | Pass   | ≤ -40 |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx2)           | cf        | dB     | 19.56  | 19.49  | 19.44  | -      | -     |
|                                                         | -40 MHz   | dB     | -43.57 | -43.51 | -43.50 | Pass   | ≤ -25 |
|                                                         | 40 MHz    | dB     | -42.60 | -42.33 | -42.54 | Pass   | ≤ -25 |
|                                                         | -80 MHz   | dB     | -52.88 | -52.92 | -52.80 | Pass   | ≤ -40 |
|                                                         | 80 MHz    | dB     | -49.89 | -49.87 | -49.80 | Pass   | ≤ -40 |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx3)           | cf        | dB     | 21.04  | 20.97  | 21.00  | -      | -     |
|                                                         | -40 MHz   | dB     | -40.64 | -40.52 | -40.66 | Pass   | ≤ -25 |
|                                                         | 40 MHz    | dB     | -40.87 | -40.99 | -40.99 | Pass   | ≤ -25 |
|                                                         | -80 MHz   | dB     | -51.75 | -51.60 | -51.72 | Pass   | ≤ -40 |
|                                                         | 80 MHz    | dB     | -50.84 | -50.80 | -50.87 | Pass   | ≤ -40 |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                                   |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|
|  <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 81<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br><b>SDCC-2020-00128</b><br>Page (113) / (135) pages |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 38       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5190     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx0) | 5100.0 to  | uW/MHz | 0.009    | 0.009    | 0.008    | Pass   | -     |
|                                    | 5141.6 MHz | MHz    | 5 141.56 | 5 141.02 | 5 140.52 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5141.6 to  | uW/MHz | 0.027    | 0.037    | 0.026    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.73 | 5 147.74 | 5 149.90 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.009    | 0.009    | 0.008    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.73 | 5 250.78 | 5 250.89 | -      | -     |
|                                    | Limit      | uW/MHz | 93.104   | 82.979   | 64.412   | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.008    | 0.008    | 0.008    | Pass   | -     |
|                                    | 5270.0 MHz | MHz    | 5 251.99 | 5 252.63 | 5 258.58 | -      | -     |
|                                    | Limit      | uW/MHz | 45.424   | 42.691   | 23.978   | -      | -     |
|                                    | 5270.0 to  | uW/MHz | 0.006    | 0.006    | 0.006    | Pass   | -     |
|                                    | 5278.4 MHz | MHz    | 5271.900 | 5274.480 | 5275.630 | -      | -     |
|                                    | Limit      | uW/MHz | 6.095    | 4.267    | 3.641    | -      | -     |
|                                    | 5278.4 to  | uW/MHz | 0.009    | 0.009    | 0.009    | Pass   | -     |
|                                    | 5400.0 MHz | MHz    | 5337.740 | 5344.670 | 5337.380 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=

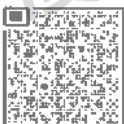


# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                            |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|
|  <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoln, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br>SDCC-2020-00128<br>Page (114) / (135) pages |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 38       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5190     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx1) | 5100.0 to  | uW/MHz | 0.068    | 0.055    | 0.083    | Pass   | -     |
|                                    | 5141.6 MHz | MHz    | 5 139.60 | 5 140.35 | 5 140.77 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5141.6 to  | uW/MHz | 0.222    | 0.206    | 0.216    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.43 | 5 148.95 | 5 148.77 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.048    | 0.044    | 0.047    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.84 | 5 250.30 | 5 250.69 | -      | -     |
|                                    | Limit      | uW/MHz | 72.272   | 250.594  | 102.087  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.050    | 0.060    | 0.068    | Pass   | -     |
|                                    | 5270.0 MHz | MHz    | 5 254.48 | 5 254.99 | 5 251.84 | -      | -     |
|                                    | Limit      | uW/MHz | 35.682   | 33.960   | 46.089   | -      | -     |
|                                    | 5270.0 to  | uW/MHz | 0.034    | 0.041    | 0.038    | Pass   | -     |
|                                    | 5278.4 MHz | MHz    | 5274.360 | 5275.170 | 5277.270 | -      | -     |
|                                    | Limit      | uW/MHz | 4.339    | 3.879    | 2.902    | -      | -     |
|                                    | 5278.4 to  | uW/MHz | 0.059    | 0.058    | 0.054    | Pass   | -     |
|                                    | 5400.0 MHz | MHz    | 5337.250 | 5346.250 | 5347.830 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT



**SongDam Certification Center**  
 #708, Creation Hall, Yongin Songdam College, 81  
 Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,  
 Korea  
 Tel: +82-31-333-3220 Fax: +82-31-624-8855

Report No.:  
 SDCC-2020-00128  
 Page (115) / (135) pages

| Channel Number                     |            | ch.    | 38       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5190     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx2) | 5100.0 to  | uW/MHz | 0.022    | 0.030    | 0.031    | Pass   | -     |
|                                    | 5141.6 MHz | MHz    | 5 141.43 | 5 141.02 | 5 141.18 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5141.6 to  | uW/MHz | 0.091    | 0.078    | 0.078    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.55 | 5 149.63 | 5 148.88 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.040    | 0.036    | 0.041    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.19 | 5 250.54 | 5 250.17 | -      | -     |
|                                    | Limit      | uW/MHz | 322.827  | 144.202  | 338.041  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.037    | 0.038    | 0.040    | Pass   | -     |
|                                    | 5270.0 MHz | MHz    | 5 260.41 | 5 252.31 | 5 264.59 | -      | -     |
|                                    | Limit      | uW/MHz | 20.080   | 44.036   | 13.389   | -      | -     |
|                                    | 5270.0 to  | uW/MHz | 0.036    | 0.035    | 0.039    | Pass   | -     |
|                                    | 5278.4 MHz | MHz    | 5276.330 | 5275.380 | 5271.930 | -      | -     |
|                                    | Limit      | uW/MHz | 3.305    | 3.769    | 6.070    | -      | -     |
|                                    | 5278.4 to  | uW/MHz | 0.073    | 0.073    | 0.076    | Pass   | -     |
|                                    | 5400.0 MHz | MHz    | 5359.870 | 5356.350 | 5361.450 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                                   |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|
|  <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br><b>SDCC-2020-00128</b><br>Page (116) / (135) pages |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 38       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5190     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx3) | 5100.0 to  | uW/MHz | 0.135    | 0.115    | 0.142    | Pass   | -     |
|                                    | 5141.6 MHz | MHz    | 5 139.31 | 5 139.40 | 5 141.27 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5141.6 to  | uW/MHz | 0.364    | 0.379    | 0.334    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.40 | 5 149.30 | 5 149.29 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 0.064    | 0.067    | 0.072    | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.36 | 5 250.69 | 5 250.07 | -      | -     |
|                                    | Limit      | uW/MHz | 218.258  | 102.087  | 425.569  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 0.055    | 0.060    | 0.053    | Pass   | -     |
|                                    | 5270.0 MHz | MHz    | 5 252.46 | 5 252.18 | 5 254.14 | -      | -     |
|                                    | Limit      | uW/MHz | 43.401   | 44.595   | 36.877   | -      | -     |
|                                    | 5270.0 to  | uW/MHz | 0.039    | 0.037    | 0.044    | Pass   | -     |
|                                    | 5278.4 MHz | MHz    | 5272.230 | 5277.160 | 5273.860 | -      | -     |
|                                    | Limit      | uW/MHz | 5.823    | 2.947    | 4.649    | -      | -     |
|                                    | 5278.4 to  | uW/MHz | 0.048    | 0.050    | 0.049    | Pass   | -     |
|                                    | 5400.0 MHz | MHz    | 5343.090 | 5338.710 | 5358.900 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

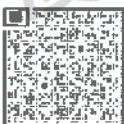


**SongDam Certification Center**  
#708, Creation Hall, Yongin Songdam College, 61  
Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,  
Korea  
Tel: +82-31-333-3220 Fax: +82-31-624-8855

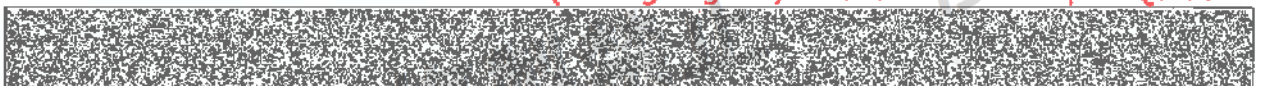
Report No.:  
SDCC-2020-00128  
Page (117) / (135) pages

| Channel Number                                          |            | ch.      | 38        |           |           | Result | Limit |
|---------------------------------------------------------|------------|----------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |            | MHz      | 5190      |           |           |        |       |
| Voltage                                                 |            | Vdc      | 10.80     | 12.00     | 13.20     | -      | -     |
| Out-Band<br>Leakage<br>Power<br>(Sum)                   | 5100.0 to  | uW/MHz   | 0.235     | 0.209     | 0.263     | Pass   | -     |
|                                                         | 5141.6 MHz | MHz      | 5141.560  | 5141.020  | 5141.270  | -      | -     |
|                                                         | Limit      | uW/MHz   | 2.500     | 2.500     | 2.500     | -      | -     |
|                                                         | 5141.6 to  | uW/MHz   | 0.703     | 0.700     | 0.654     | Pass   | -     |
|                                                         | 5150.0 MHz | MHz      | 5149.730  | 5149.630  | 5149.900  | -      | -     |
|                                                         | Limit      | uW/MHz   | 15.000    | 15.000    | 15.000    | -      | -     |
|                                                         | 5250.0 to  | uW/MHz   | 0.161     | 0.156     | 0.168     | Pass   | -     |
|                                                         | 5251.0 MHz | MHz      | 5250.840  | 5250.780  | 5250.890  | -      | -     |
|                                                         | Limit      | uW/MHz   | 72.272    | 82.979    | 64.412    | -      | -     |
|                                                         | 5251.0 to  | uW/MHz   | 0.150     | 0.166     | 0.169     | Pass   | -     |
|                                                         | 5270.0 MHz | MHz      | 5260.410  | 5254.990  | 5264.590  | -      | -     |
|                                                         | Limit      | uW/MHz   | 20.080    | 33.960    | 13.389    | -      | -     |
|                                                         | 5270.0 to  | uW/MHz   | 0.115     | 0.119     | 0.127     | Pass   | -     |
|                                                         | 5278.4 MHz | MHz      | 5276.330  | 5277.160  | 5277.270  | -      | -     |
|                                                         | Limit      | uW/MHz   | 3.305     | 2.947     | 2.902     | -      | -     |
|                                                         | 5278.4 to  | uW/MHz   | 0.190     | 0.190     | 0.189     | Pass   | -     |
| 5400.0 MHz                                              | MHz        | 5359.870 | 5356.350  | 5361.450  | -         | -      |       |
| Limit                                                   | uW/MHz     | 2.500    | 2.500     | 2.500     | -         | -      |       |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx0) | 30 to      | nW       | 0.358     | 0.323     | 0.414     | Pass   | ≤ 4   |
|                                                         | 1000 MHz   | MHz      | 56.19     | 56.19     | 56.19     | -      | -     |
|                                                         | 1000 to    | nW       | 0.067     | 0.067     | 0.069     | Pass   | ≤ 20  |
|                                                         | 10000 MHz  | MHz      | 7 237.00  | 7 237.00  | 3 619.00  | -      | -     |
|                                                         | 10000 to   | nW       | 0.053     | 0.042     | 0.053     | Pass   | ≤ 20  |
|                                                         | 26000 MHz  | MHz      | 23 600.00 | 25 696.00 | 24 016.00 | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



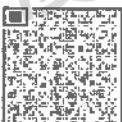
# TEST REPORT

|                                                                                   |                                                                                                                                                                                                |                                                            |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|
|  | <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br>SDCC-2020-00128<br>Page (118) / (135) pages |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|

| Channel Number                                          |           | ch. | 38        |           |           | Result | Limit    |
|---------------------------------------------------------|-----------|-----|-----------|-----------|-----------|--------|----------|
| Measurement Frequency                                   |           | MHz | 5190      |           |           |        |          |
| Voltage                                                 |           | Vdc | 10.80     | 12.00     | 13.20     | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx1) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 885.54    | 316.15    | 1 000.00  | -      | -        |
|                                                         | 1000 to   | nW  | 0.039     | 0.037     | 0.032     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.055     | 0.054     | 0.062     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 25 696.00 | 21 472.00 | 24 528.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx2) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 719.67    | 359.80    | 927.25    | -      | -        |
|                                                         | 1000 to   | nW  | 0.030     | 0.037     | 0.032     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.044     | 0.044     | 0.053     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 22 000.00 | 23 008.00 | 22 096.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx3) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 94.99     | 97.90     | 72.68     | -      | -        |
|                                                         | 1000 to   | nW  | 0.017     | 0.019     | 0.018     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 133.00  | 9 469.00  | 2 674.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.059     | 0.072     | 0.062     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 24 400.00 | 25 552.00 | 25 568.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Sum) | 30 to     | nW  | 0.361     | 0.326     | 0.416     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | -         | -         | -         | -      | -        |
|                                                         | 1000 to   | nW  | 0.153     | 0.160     | 0.151     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | -         | -         | -         | -      | -        |
|                                                         | 10000 to  | nW  | 0.210     | 0.212     | 0.231     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | -         | -         | -         | -      | -        |
| Burst Length of Transmitted Signals                     |           |     | Good      | Good      | Good      | Pass   | ≤ 4 ms   |
| Carrier Sensing Function                                |           |     | Good      | Good      | Good      | Pass   | 100 mV/m |
| Interference Prevention Function                        |           |     | Good      |           |           | Pass   | -        |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                            |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|
|  <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br>SDCC-2020-00128<br>Page (119) / (135) pages |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|

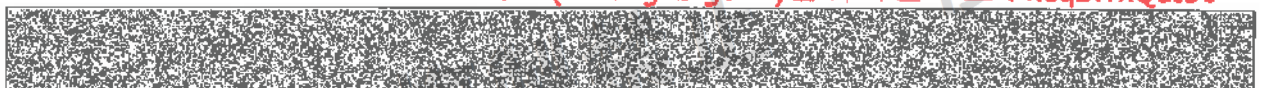
## 4.5.3.2. Middle Channel

| Channel Number                                          |           | ch.    | 46        |           |           | Result | Limit      |
|---------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|------------|
| Measurement Frequency                                   |           | MHz    | 5230      |           |           |        |            |
| Voltage                                                 |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -          |
| Frequency Measurements (Tx0)                            |           | MHz    | 5 229.97  | 5 229.97  | 5 229.97  | -      | -          |
| Frequency Tolerance (Tx0)                               |           | ppm    | -5.783    | -5.777    | -5.771    | Pass   | ± 20       |
| Frequency Measurements (Tx1)                            |           | MHz    | 5 229.97  | 5 229.97  | 5 229.97  | -      | -          |
| Frequency Tolerance (Tx1)                               |           | ppm    | -5.967    | -5.959    | -5.956    | Pass   | ± 20       |
| Frequency Measurements (Tx2)                            |           | MHz    | 5 229.97  | 5 229.97  | 5 229.97  | -      | -          |
| Frequency Tolerance (Tx2)                               |           | ppm    | -6.013    | -6.011    | -6.009    | Pass   | ± 20       |
| Frequency Measurements (Tx3)                            |           | MHz    | 5 229.97  | 5 229.97  | 5 229.97  | -      | -          |
| Frequency Tolerance (Tx3)                               |           | ppm    | -6.213    | -6.188    | -6.172    | Pass   | ± 20       |
| Occupied Bandwidth (Tx0)                                |           | MHz    | 36.310    | 36.340    | 36.310    | Pass   | ≤ 40       |
| Occupied Bandwidth (Tx1)                                |           | MHz    | 36.290    | 36.260    | 36.260    | Pass   | ≤ 40       |
| Occupied Bandwidth (Tx2)                                |           | MHz    | 36.170    | 36.260    | 36.240    | Pass   | ≤ 40       |
| Occupied Bandwidth (Tx3)                                |           | MHz    | 36.410    | 36.360    | 36.410    | Pass   | ≤ 40       |
| RF Output Power (Tx0)                                   |           | mW/MHz | 0.545     | 0.541     | 0.535     | Pass   | ≤ 5.0      |
| RF Output Power (Tx1)                                   |           | mW/MHz | 0.615     | 0.611     | 0.606     | Pass   | ≤ 5.0      |
| RF Output Power (Tx2)                                   |           | mW/MHz | 0.869     | 0.838     | 0.852     | Pass   | ≤ 5.0      |
| RF Output Power (Tx3)                                   |           | mW/MHz | 0.771     | 0.753     | 0.745     | Pass   | ≤ 5.0      |
| RF Output Power (Sum)                                   |           | mW/MHz | 2.800     | 2.742     | 2.737     | Pass   | ≤ 5.0      |
| RF Output Power Tolerance                               |           | %      | -6.68     | -8.60     | -8.75     | Pass   | +20 to -80 |
| E.I.R.P. (Tx0)                                          |           | mW/MHz | 0.864     | 0.857     | 0.848     | Pass   | ≤ 5.0      |
| E.I.R.P. (Tx1)                                          |           | mW/MHz | 0.974     | 0.968     | 0.960     | Pass   | ≤ 5.0      |
| E.I.R.P. (Tx2)                                          |           | mW/MHz | 1.377     | 1.328     | 1.351     | Pass   | ≤ 5.0      |
| E.I.R.P. (Tx3)                                          |           | mW/MHz | 1.222     | 1.193     | 1.180     | Pass   | ≤ 5.0      |
| E.I.R.P. (Sum)                                          |           | mW/MHz | 4.437     | 4.346     | 4.339     | Pass   | ≤ 5.0      |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx0) | 30 to     | uW/MHz | 0.022     | 0.021     | 0.019     | Pass   | ≤ 2.5      |
|                                                         | 5100 MHz  | MHz    | 3 158.19  | 3 056.79  | 3 710.82  | -      | -          |
|                                                         | 5400 to   | uW/MHz | 0.164     | 0.189     | 0.199     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 24 310.80 | 25 649.80 | 24 640.40 | -      | -          |

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# TEST REPORT

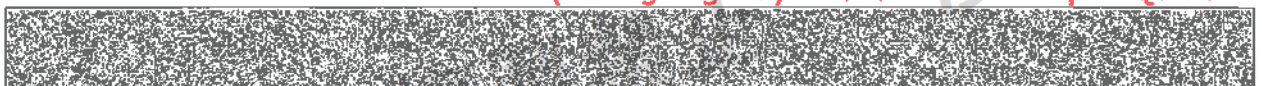
|                                                                                                                                                                                                                                                                                            |                                                            |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|
|  <b>SongDam Certification Center</b><br>송담인증센터<br>#708, Creation Hall, Yongin Songdam College, 81<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8655 | Report No.:<br>SDCC-2020-00128<br>Page (120) / (135) pages |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|

| Channel Number                                          |           | ch.    | 46        |           |           | Result | Limit |
|---------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |           | MHz    | 5230      |           |           |        |       |
| Voltage                                                 |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx1) | 30 to     | uW/MHz | 0.038     | 0.040     | 0.036     | Pass   | ≤ 2.5 |
|                                                         | 5100 MHz  | MHz    | 5 064.51  | 5 084.79  | 5 084.79  | -      | -     |
|                                                         | 5400 to   | uW/MHz | 0.200     | 0.165     | 0.150     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 393.20 | 25 011.20 | 24 331.40 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx2) | 30 to     | uW/MHz | 0.044     | 0.036     | 0.035     | Pass   | ≤ 2.5 |
|                                                         | 5100 MHz  | MHz    | 5 074.65  | 5 064.51  | 5 084.79  | -      | -     |
|                                                         | 5400 to   | uW/MHz | 0.178     | 0.175     | 0.173     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 393.20 | 24 640.40 | 24 722.80 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx3) | 30 to     | uW/MHz | 0.045     | 0.047     | 0.044     | Pass   | ≤ 2.5 |
|                                                         | 5100 MHz  | MHz    | 5 084.79  | 5 054.37  | 5 074.65  | -      | -     |
|                                                         | 5400 to   | uW/MHz | 0.205     | 0.157     | 0.187     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | 24 228.40 | 24 970.00 | 24 310.80 | -      | -     |
| Unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Sum) | 30 to     | uW/MHz | 0.148     | 0.144     | 0.134     | Pass   | ≤ 2.5 |
|                                                         | 5100 MHz  | MHz    | -         | -         | -         | -      | -     |
|                                                         | 5400 to   | uW/MHz | 0.747     | 0.685     | 0.709     | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | -         | -         | -         | -      | -     |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx0)           | cf        | dB     | 20.13     | 20.13     | 20.10     | -      | -     |
|                                                         | -40 MHz   | dB     | -40.55    | -40.73    | -40.47    | Pass   | ≤ -25 |
|                                                         | 40 MHz    | dB     | -38.04    | -37.90    | -38.37    | Pass   | ≤ -25 |
|                                                         | -80 MHz   | dB     | -51.40    | -51.37    | -51.03    | Pass   | ≤ -40 |
|                                                         | 80 MHz    | dB     | -50.72    | -50.73    | -50.36    | Pass   | ≤ -40 |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx1)           | cf        | dB     | 20.74     | 20.70     | 20.64     | -      | -     |
|                                                         | -40 MHz   | dB     | -41.55    | -41.51    | -41.66    | Pass   | ≤ -25 |
|                                                         | 40 MHz    | dB     | -39.56    | -39.82    | -39.40    | Pass   | ≤ -25 |
|                                                         | -80 MHz   | dB     | -51.85    | -51.55    | -51.44    | Pass   | ≤ -40 |
|                                                         | 80 MHz    | dB     | -51.52    | -51.09    | -50.97    | Pass   | ≤ -40 |

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# TEST REPORT

|                                                                                   |                                                                                                                                                                                          |                                                            |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|
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|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|

| Channel Number                       |            | ch.    | 46       |          |          | Result | Limit |
|--------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency                |            | MHz    | 5230     |          |          |        |       |
| Voltage                              |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Adjacent Channel Leakage Power (Tx2) | cf         | dB     | 21.82    | 21.85    | 21.77    | -      | -     |
|                                      | -40 MHz    | dB     | -41.21   | -41.40   | -40.67   | Pass   | ≤-25  |
|                                      | 40 MHz     | dB     | -38.39   | -38.62   | -38.69   | Pass   | ≤-25  |
|                                      | -80 MHz    | dB     | -52.30   | -52.39   | -52.29   | Pass   | ≤-40  |
|                                      | 80 MHz     | dB     | -50.42   | -50.52   | -50.43   | Pass   | ≤-40  |
| Adjacent Channel Leakage Power (Tx3) | cf         | dB     | 21.73    | 21.76    | 21.80    | -      | -     |
|                                      | -40 MHz    | dB     | -39.79   | -39.63   | -39.84   | Pass   | ≤-25  |
|                                      | 40 MHz     | dB     | -38.62   | -38.49   | -38.40   | Pass   | ≤-25  |
|                                      | -80 MHz    | dB     | -51.03   | -51.03   | -51.05   | Pass   | ≤-40  |
|                                      | 80 MHz     | dB     | -51.12   | -51.13   | -51.14   | Pass   | ≤-40  |
| Out-Band Leakage Power (Tx0)         | 5100.0 to  | uW/MHz | 0.005    | 0.004    | 0.004    | Pass   | -     |
|                                      | 5141.6 MHz | MHz    | 5 140.06 | 5 136.32 | 5 141.27 | -      | -     |
|                                      | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                      | 5141.6 to  | uW/MHz | 0.007    | 0.006    | 0.006    | Pass   | -     |
|                                      | 5150.0 MHz | MHz    | 5 148.53 | 5 148.29 | 5 148.11 | -      | -     |
|                                      | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                      | 5250.0 to  | uW/MHz | 6.799    | 6.704    | 6.457    | Pass   | -     |
|                                      | 5251.0 MHz | MHz    | 5 250.01 | 5 250.00 | 5 250.00 | -      | -     |
|                                      | Limit      | uW/MHz | 488.619  | 500.000  | 500.000  | -      | -     |
|                                      | 5251.0 to  | uW/MHz | 2.324    | 2.077    | 1.854    | Pass   | -     |
|                                      | 5270.0 MHz | MHz    | 5 251.04 | 5 251.04 | 5 251.00 | -      | -     |
|                                      | Limit      | uW/MHz | 49.806   | 49.806   | 50.000   | -      | -     |
|                                      | 5270.0 to  | uW/MHz | 0.261    | 0.253    | 0.269    | Pass   | -     |
|                                      | 5278.4 MHz | MHz    | 5270.610 | 5271.550 | 5270.660 | -      | -     |
|                                      | Limit      | uW/MHz | 7.284    | 6.397    | 7.234    | -      | -     |
|                                      | 5278.4 to  | uW/MHz | 0.096    | 0.043    | 0.041    | Pass   | -     |
|                                      | 5400.0 MHz | MHz    | 5278.640 | 5278.400 | 5279.860 | -      | -     |
|                                      | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                      |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 81<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/> <b>SDCC-2020-00128</b><br/>         Page (122) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------|--|

| Channel Number               |            | ch.    | 46       |          |          | Result | Limit |
|------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency        |            | MHz    | 5230     |          |          |        |       |
| Voltage                      |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band Leakage Power (Tx1) | 5100.0 to  | uW/MHz | 0.029    | 0.025    | 0.029    | Pass   | -     |
|                              | 5141.6 MHz | MHz    | 5 137.90 | 5 133.82 | 5 141.60 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                              | 5141.6 to  | uW/MHz | 0.035    | 0.037    | 0.035    | Pass   | -     |
|                              | 5150.0 MHz | MHz    | 5 147.26 | 5 144.37 | 5 146.01 | -      | -     |
|                              | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                              | 5250.0 to  | uW/MHz | 52.688   | 54.290   | 51.830   | Pass   | -     |
|                              | 5251.0 MHz | MHz    | 5 250.01 | 5 250.00 | 5 250.01 | -      | -     |
|                              | Limit      | uW/MHz | 488.619  | 500.000  | 488.619  | -      | -     |
|                              | 5251.0 to  | uW/MHz | 5.346    | 5.434    | 5.259    | Pass   | -     |
|                              | 5270.0 MHz | MHz    | 5 252.82 | 5 252.77 | 5 251.02 | -      | -     |
|                              | Limit      | uW/MHz | 41.912   | 42.116   | 49.903   | -      | -     |
|                              | 5270.0 to  | uW/MHz | 0.774    | 0.771    | 0.744    | Pass   | -     |
|                              | 5278.4 MHz | MHz    | 5270.120 | 5270.000 | 5270.290 | -      | -     |
|                              | Limit      | uW/MHz | 7.794    | 7.924    | 7.613    | -      | -     |
|                              | 5278.4 to  | uW/MHz | 0.176    | 0.172    | 0.155    | Pass   | -     |
|                              | 5400.0 MHz | MHz    | 5278.640 | 5278.520 | 5279.130 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, Yongin Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-624-8855</p> | <p>Report No.:<br/>         SDCC-2020-00128<br/>         Page (123) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 46       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5230     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx2) | 5100.0 to  | uW/MHz | 0.023    | 0.027    | 0.025    | Pass   | -     |
|                                    | 5141.6 MHz | MHz    | 5 137.15 | 5 137.32 | 5 138.23 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5141.6 to  | uW/MHz | 0.036    | 0.029    | 0.037    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 148.97 | 5 148.32 | 5 144.86 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 56.674   | 60.804   | 59.403   | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.02 | 5 250.05 | 5 250.02 | -      | -     |
|                                    | Limit      | uW/MHz | 477.496  | 445.625  | 477.496  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 11.692   | 11.540   | 11.303   | Pass   | -     |
|                                    | 5270.0 MHz | MHz    | 5 251.67 | 5 251.67 | 5 251.51 | -      | -     |
|                                    | Limit      | uW/MHz | 46.855   | 46.855   | 47.588   | -      | -     |
|                                    | 5270.0 to  | uW/MHz | 1.646    | 1.727    | 1.832    | Pass   | -     |
|                                    | 5278.4 MHz | MHz    | 5272.010 | 5270.910 | 5270.970 | -      | -     |
|                                    | Limit      | uW/MHz | 6.003    | 6.988    | 6.931    | -      | -     |
|                                    | 5278.4 to  | uW/MHz | 0.427    | 0.258    | 0.307    | Pass   | -     |
|                                    | 5400.0 MHz | MHz    | 5278.400 | 5281.560 | 5279.130 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                                   |
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|

| Channel Number                     |            | ch.    | 46       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5230     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx3) | 5100.0 to  | uW/MHz | 0.035    | 0.032    | 0.038    | Pass   | -     |
|                                    | 5141.6 MHz | MHz    | 5 138.11 | 5 138.85 | 5 135.73 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5141.6 to  | uW/MHz | 0.050    | 0.046    | 0.042    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 145.11 | 5 146.07 | 5 143.92 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 54.653   | 56.710   | 54.152   | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.08 | 5 250.05 | 5 250.03 | -      | -     |
|                                    | Limit      | uW/MHz | 415.882  | 445.625  | 466.627  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 9.044    | 8.575    | 8.992    | Pass   | -     |
|                                    | 5270.0 MHz | MHz    | 5 251.10 | 5 251.06 | 5 251.21 | -      | -     |
|                                    | Limit      | uW/MHz | 49.518   | 49.710   | 48.992   | -      | -     |
|                                    | 5270.0 to  | uW/MHz | 1.297    | 1.525    | 1.518    | Pass   | -     |
|                                    | 5278.4 MHz | MHz    | 5271.290 | 5270.370 | 5270.040 | -      | -     |
|                                    | Limit      | uW/MHz | 6.631    | 7.530    | 7.881    | -      | -     |
|                                    | 5278.4 to  | uW/MHz | 0.190    | 0.223    | 0.200    | Pass   | -     |
|                                    | 5400.0 MHz | MHz    | 5280.470 | 5278.520 | 5278.640 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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# TEST REPORT

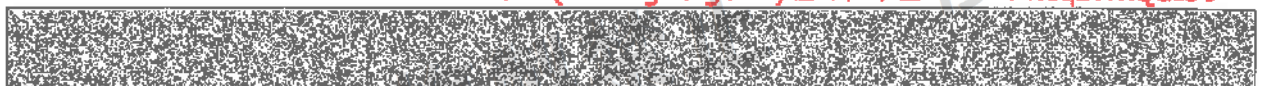
|                                                                                   |                                                                                                                                                                                                |                                                            |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|
|  | <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 81<br>Dongbu-ro, Cheoln, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br>SDCC-2020-00128<br>Page (125) / (135) pages |  |
|-----------------------------------------------------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|

| Channel Number                                          |            | ch.    | 46        |           |           | Result | Limit |
|---------------------------------------------------------|------------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |            | MHz    | 5230      |           |           |        |       |
| Voltage                                                 |            | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Out-Band<br>Leakage<br>Power<br>(Sum)                   | 5100.0 to  | uW/MHz | 0.091     | 0.088     | 0.096     | Pass   | -     |
|                                                         | 5141.6 MHz | MHz    | 5140.060  | 5138.850  | 5141.600  | -      | -     |
|                                                         | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
|                                                         | 5141.6 to  | uW/MHz | 0.129     | 0.116     | 0.120     | Pass   | -     |
|                                                         | 5150.0 MHz | MHz    | 5148.970  | 5148.320  | 5148.110  | -      | -     |
|                                                         | Limit      | uW/MHz | 15.000    | 15.000    | 15.000    | -      | -     |
|                                                         | 5250.0 to  | uW/MHz | 170.814   | 178.508   | 171.842   | Pass   | -     |
|                                                         | 5251.0 MHz | MHz    | 5250.080  | 5250.050  | 5250.030  | -      | -     |
|                                                         | Limit      | uW/MHz | 415.882   | 445.625   | 466.627   | -      | -     |
|                                                         | 5251.0 to  | uW/MHz | 28.406    | 27.626    | 27.408    | Pass   | -     |
|                                                         | 5270.0 MHz | MHz    | 5252.820  | 5252.770  | 5251.510  | -      | -     |
|                                                         | Limit      | uW/MHz | 41.912    | 42.116    | 47.588    | -      | -     |
|                                                         | 5270.0 to  | uW/MHz | 3.978     | 4.276     | 4.363     | Pass   | -     |
|                                                         | 5278.4 MHz | MHz    | 5272.010  | 5271.550  | 5270.970  | -      | -     |
|                                                         | Limit      | uW/MHz | 6.003     | 6.397     | 6.931     | -      | -     |
|                                                         | 5278.4 to  | uW/MHz | 0.889     | 0.696     | 0.703     | Pass   | -     |
|                                                         | 5400.0 MHz | MHz    | 5280.470  | 5281.560  | 5279.860  | -      | -     |
|                                                         | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx0) | 30 to      | nW     | 0.299     | 0.280     | 0.367     | Pass   | ≤ 4   |
|                                                         | 1000 MHz   | MHz    | 55.22     | 57.16     | 56.19     | -      | -     |
|                                                         | 1000 to    | nW     | 0.065     | 0.068     | 0.066     | Pass   | ≤ 20  |
|                                                         | 10000 MHz  | MHz    | 7 237.00  | 7 237.00  | 3 619.00  | -      | -     |
|                                                         | 10000 to   | nW     | 0.049     | 0.055     | 0.048     | Pass   | ≤ 20  |
|                                                         | 26000 MHz  | MHz    | 26 000.00 | 24 544.00 | 24 016.00 | -      | -     |

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# TEST REPORT

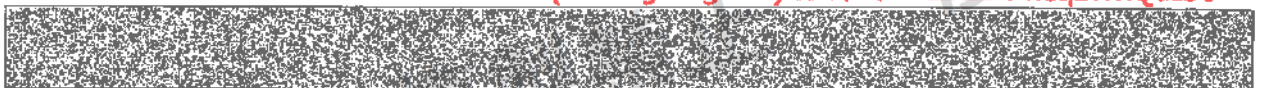
|                                                                                                                                                                                                                                                                                  |                                                                   |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|
|  <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8655 | Report No.:<br><b>SDCC-2020-00128</b><br>Page (128) / (135) pages |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|

| Channel Number                                          |           | ch. | 46        |           |           | Result | Limit    |
|---------------------------------------------------------|-----------|-----|-----------|-----------|-----------|--------|----------|
| Measurement Frequency                                   |           | MHz | 5230      |           |           |        |          |
| Voltage                                                 |           | Vdc | 10.80     | 12.00     | 13.20     | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx1) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 735.19    | 978.66    | 799.21    | -      | -        |
|                                                         | 1000 to   | nW  | 0.035     | 0.038     | 0.032     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.082     | 0.055     | 0.053     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 25 504.00 | 22 128.00 | 25 568.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx2) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 414.12    | 856.44    | 156.10    | -      | -        |
|                                                         | 1000 to   | nW  | 0.030     | 0.035     | 0.035     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.047     | 0.063     | 0.046     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 25 984.00 | 24 288.00 | 21 536.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx3) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | 794.36    | 510.15    | 938.89    | -      | -        |
|                                                         | 1000 to   | nW  | 0.018     | 0.016     | 0.017     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | 6 184.00  | 3 124.00  | 3 052.00  | -      | -        |
|                                                         | 10000 to  | nW  | 0.045     | 0.043     | 0.035     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | 25 472.00 | 25 312.00 | 24 096.00 | -      | -        |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Sum) | 30 to     | nW  | 0.302     | 0.282     | 0.370     | Pass   | ≤ 4      |
|                                                         | 1000 MHz  | MHz | -         | -         | -         | -      | -        |
|                                                         | 1000 to   | nW  | 0.148     | 0.157     | 0.149     | Pass   | ≤ 20     |
|                                                         | 10000 MHz | MHz | -         | -         | -         | -      | -        |
|                                                         | 10000 to  | nW  | 0.222     | 0.216     | 0.183     | Pass   | ≤ 20     |
|                                                         | 26000 MHz | MHz | -         | -         | -         | -      | -        |
| Burst Length of Transmitted Signals                     |           |     | Good      | Good      | Good      | Pass   | ≤ 4 ms   |
| Carrier Sensing Function                                |           |     | Good      | Good      | Good      | Pass   | 100 mV/m |
| Interference Prevention Function                        |           |     | Good      |           |           | Pass   | -        |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|
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|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|

## 4.6. 802.11ac (VHT80)

### 4.6.1. Duty cycle

|            |          |       |    |
|------------|----------|-------|----|
| Duty Cycle | On       | 0.113 | ms |
|            | Off      | 0.027 | ms |
|            | On + Off | 0.140 | ms |
|            | Ratio    | 80.5  | %  |

### 4.6.2. Declaration RF Output Power

|                       |       |         |
|-----------------------|-------|---------|
| Declaration RF Output | 2     | mW/MHz  |
| Power                 | 3.010 | dBm/MHz |
| E.I.R.P.              | 6.999 | mW/MHz  |
|                       | 5.010 | dBm/MHz |

### 4.6.3. Test Result

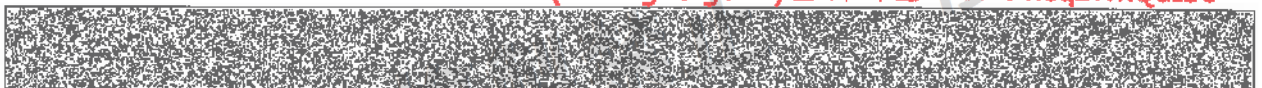
#### 4.6.3.1. Lowest Channel

| Channel Number               | ch. | 42       |          |          | Result | Limit |
|------------------------------|-----|----------|----------|----------|--------|-------|
| Measurement Frequency        | MHz | 5210     |          |          |        |       |
| Voltage                      | Vdc | 10.80    | 12.00    | 13.20    | -      | -     |
| Frequency Measurements (Tx0) | MHz | 5 209.97 | 5 209.97 | 5 209.97 | -      | -     |
| Frequency Tolerance (Tx0)    | ppm | -6.088   | -6.077   | -6.072   | Pass   | ± 20  |
| Frequency Measurements (Tx1) | MHz | 5 209.97 | 5 209.97 | 5 209.97 | -      | -     |
| Frequency Tolerance (Tx1)    | ppm | -6.095   | -6.098   | -6.100   | Pass   | ± 20  |
| Frequency Measurements (Tx2) | MHz | 5 209.97 | 5 209.97 | 5 209.97 | -      | -     |
| Frequency Tolerance (Tx2)    | ppm | -6.112   | -6.106   | -6.102   | Pass   | ± 20  |
| Frequency Measurements (Tx3) | MHz | 5 209.97 | 5 209.97 | 5 209.97 | -      | -     |
| Frequency Tolerance (Tx3)    | ppm | -6.196   | -6.194   | -6.185   | Pass   | ± 20  |
| Occupied Bandwidth (Tx0)     | MHz | 75.140   | 75.150   | 75.120   | Pass   | ≤ 80  |
| Occupied Bandwidth (Tx1)     | MHz | 75.140   | 75.200   | 75.200   | Pass   | ≤ 80  |
| Occupied Bandwidth (Tx2)     | MHz | 75.060   | 75.050   | 75.120   | Pass   | ≤ 80  |
| Occupied Bandwidth (Tx3)     | MHz | 75.310   | 75.240   | 75.210   | Pass   | ≤ 80  |

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# TEST REPORT

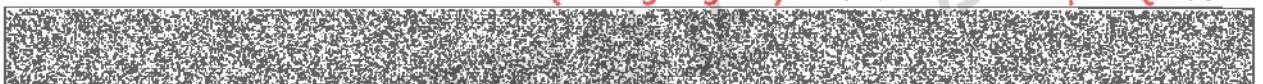
|                                                                                                                                                                                                                                                                                             |                                                                            |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>#708, Creation Hall, Yongin Songdam College, 61<br/>Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>Korea<br/>Tel: +82-31-333-3220 Fax: +82-31-624-8655</p> | <p>Report No.:<br/><b>SDCC-2020-00128</b><br/>Page (128) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------------------------------------------------------|--|

| Channel Number                                          |           | ch.    | 42        |           |           | Result | Limit      |
|---------------------------------------------------------|-----------|--------|-----------|-----------|-----------|--------|------------|
| Measurement Frequency                                   |           | MHz    | 5210      |           |           |        |            |
| Voltage                                                 |           | Vdc    | 10.80     | 12.00     | 13.20     | -      | -          |
| RF Output Power (Tx0)                                   |           | mW/MHz | 0.327     | 0.320     | 0.315     | Pass   | ≤ 2.5      |
| RF Output Power (Tx1)                                   |           | mW/MHz | 0.492     | 0.479     | 0.469     | Pass   | ≤ 2.5      |
| RF Output Power (Tx2)                                   |           | mW/MHz | 0.341     | 0.335     | 0.336     | Pass   | ≤ 2.5      |
| RF Output Power (Tx3)                                   |           | mW/MHz | 0.395     | 0.395     | 0.403     | Pass   | ≤ 2.5      |
| RF Output Power (Sum)                                   |           | mW/MHz | 1.556     | 1.529     | 1.523     | Pass   | ≤ 2.5      |
| RF Output Power Tolerance                               |           | %      | -22.22    | -23.53    | -23.86    | Pass   | +20 to -80 |
| E.I.R.P. (Tx0)                                          |           | mW/MHz | 0.518     | 0.507     | 0.499     | Pass   | ≤ 2.5      |
| E.I.R.P. (Tx1)                                          |           | mW/MHz | 0.780     | 0.760     | 0.743     | Pass   | ≤ 2.5      |
| E.I.R.P. (Tx2)                                          |           | mW/MHz | 0.541     | 0.531     | 0.532     | Pass   | ≤ 2.5      |
| E.I.R.P. (Tx3)                                          |           | mW/MHz | 0.627     | 0.626     | 0.639     | Pass   | ≤ 2.5      |
| E.I.R.P. (Sum)                                          |           | mW/MHz | 2.465     | 2.424     | 2.413     | Pass   | ≤ 2.5      |
| unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx0) | 30 to     | uW/MHz | 0.049     | 0.023     | 0.270     | Pass   | ≤ 2.5      |
|                                                         | 5020 MHz  | MHz    | 2 478.81  | 65.49     | 2 478.81  | -      | -          |
|                                                         | 5480 to   | uW/MHz | 0.163     | 0.166     | 0.166     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 24 619.80 | 24 310.80 | 24 269.60 | -      | -          |
| unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx1) | 30 to     | uW/MHz | 0.025     | 0.024     | 0.049     | Pass   | ≤ 2.5      |
|                                                         | 5020 MHz  | MHz    | 5 084.79  | 5 059.44  | 831.06    | -      | -          |
|                                                         | 5480 to   | uW/MHz | 0.180     | 0.162     | 0.176     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 24 352.00 | 25 670.40 | 24 290.20 | -      | -          |
| unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx2) | 30 to     | uW/MHz | 0.021     | 0.019     | 0.026     | Pass   | ≤ 2.5      |
|                                                         | 5020 MHz  | MHz    | 5 064.51  | 5 059.44  | 5 064.51  | -      | -          |
|                                                         | 5480 to   | uW/MHz | 0.173     | 0.182     | 0.181     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 24 990.60 | 24 640.40 | 24 970.00 | -      | -          |
| unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Tx3) | 30 to     | uW/MHz | 0.031     | 0.031     | 0.028     | Pass   | ≤ 2.5      |
|                                                         | 5020 MHz  | MHz    | 5 023.95  | 5 054.37  | 5 064.51  | -      | -          |
|                                                         | 5480 to   | uW/MHz | 0.164     | 0.181     | 0.177     | Pass   | ≤ 2.5      |
|                                                         | 26000 MHz | MHz    | 24 331.40 | 23 692.80 | 24 640.40 | -      | -          |

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# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                                   |  |
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------|--|

| Channel Number                                          |           | ch.    | 42     |        |        | Result | Limit |
|---------------------------------------------------------|-----------|--------|--------|--------|--------|--------|-------|
| Measurement Frequency                                   |           | MHz    | 5210   |        |        |        |       |
| Voltage                                                 |           | Vdc    | 10.80  | 12.00  | 13.20  | -      | -     |
| unwanted<br>(Spurious)<br>Emission<br>Strength<br>(Sum) | 30 to     | uW/MHz | 0.126  | 0.098  | 0.374  | Pass   | ≤ 2.5 |
|                                                         | 5020 MHz  | MHz    | -      | -      | -      | -      | -     |
|                                                         | 5480 to   | uW/MHz | 0.681  | 0.690  | 0.700  | Pass   | ≤ 2.5 |
|                                                         | 26000 MHz | MHz    | -      | -      | -      | -      | -     |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx0)           | cf        | dB     | 19.10  | 19.14  | 19.04  | -      | -     |
|                                                         | -80 MHz   | dB     | -43.10 | -43.18 | -43.17 | Pass   | ≤ -25 |
|                                                         | 80 MHz    | dB     | -40.12 | -40.18 | -40.05 | Pass   | ≤ -25 |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx1)           | cf        | dB     | 20.92  | 20.78  | 20.89  | -      | -     |
|                                                         | -80 MHz   | dB     | -43.65 | -43.54 | -43.87 | Pass   | ≤ -25 |
|                                                         | 80 MHz    | dB     | -40.00 | -39.82 | -40.37 | Pass   | ≤ -25 |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx2)           | cf        | dB     | 19.50  | 19.52  | 19.36  | -      | -     |
|                                                         | -80 MHz   | dB     | -43.79 | -44.19 | -43.99 | Pass   | ≤ -25 |
|                                                         | 80 MHz    | dB     | -40.96 | -41.03 | -40.63 | Pass   | ≤ -25 |
| Adjacent<br>Channel<br>Leakage<br>Power (Tx3)           | cf        | dB     | 20.98  | 20.92  | 20.98  | -      | -     |
|                                                         | -80 MHz   | dB     | -42.79 | -42.82 | -42.98 | Pass   | ≤ -25 |
|                                                         | 80 MHz    | dB     | -40.64 | -40.62 | -40.58 | Pass   | ≤ -25 |

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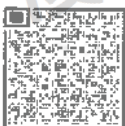


# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                            |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|
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|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|

| Channel Number               |            | ch.    | 42       |          |          | Result | Limit |
|------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency        |            | MHz    | 5210     |          |          |        |       |
| Voltage                      |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band Leakage Power (Tx0) | 5020.0 to  | uW/MHz | 0.003    | 0.003    | 0.003    | Pass   | -     |
|                              | 5123.2 MHz | MHz    | 5 116.29 | 5 121.65 | 5 115.46 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                              | 5123.2 to  | uW/MHz | 0.012    | 0.012    | 0.009    | Pass   | -     |
|                              | 5150.0 MHz | MHz    | 5 147.88 | 5 146.62 | 5 148.87 | -      | -     |
|                              | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                              | 5250.0 to  | uW/MHz | 3.435    | 3.359    | 3.328    | Pass   | -     |
|                              | 5251.0 MHz | MHz    | 5 250.00 | 5 250.00 | 5 250.01 | -      | -     |
|                              | Limit      | uW/MHz | 250.000  | 250.000  | 244.309  | -      | -     |
|                              | 5251.0 to  | uW/MHz | 1.204    | 1.151    | 1.013    | Pass   | -     |
|                              | 5290.0 MHz | MHz    | 5 251.00 | 5 251.00 | 5 251.12 | -      | -     |
|                              | Limit      | uW/MHz | 25.000   | 25.000   | 24.859   | -      | -     |
|                              | 5290.0 to  | uW/MHz | 1.204    | 1.151    | 1.013    | Pass   | -     |
|                              | 5296.7 MHz | MHz    | 5 290.74 | 5 296.62 | 5 290.64 | -      | -     |
|                              | Limit      | uW/MHz | 3.765    | 2.508    | 3.791    | -      | -     |
|                              | 5296.7 to  | uW/MHz | 0.013    | 0.010    | 0.010    | Pass   | -     |
|                              | 5480.0 MHz | MHz    | 5 297.80 | 5 299.45 | 5 298.72 | -      | -     |
|                              | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT



**SongDam Certification Center**  
#708, Creation Hall, Yongin Songdam College, 61  
Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,  
Korea  
Tel: +82-31-333-3220 Fax: +82-31-624-8855

Report No.:  
SDCC-2020-00128  
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| Channel Number                     |            | ch.    | 42       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5210     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx1) | 5020.0 to  | uW/MHz | 0.032    | 0.031    | 0.032    | Pass   | -     |
|                                    | 5123.2 MHz | MHz    | 5 111.85 | 5 118.97 | 5 121.45 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5123.2 to  | uW/MHz | 0.127    | 0.154    | 0.165    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 149.65 | 5 149.97 | 5 146.86 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 40.987   | 39.242   | 41.109   | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.00 | 5 250.02 | 5 250.05 | -      | -     |
|                                    | Limit      | uW/MHz | 250.000  | 238.748  | 222.813  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 8.773    | 7.682    | 9.662    | Pass   | -     |
|                                    | 5290.0 MHz | MHz    | 5 251.16 | 5 251.00 | 5 251.00 | -      | -     |
|                                    | Limit      | uW/MHz | 24.812   | 25.000   | 25.000   | -      | -     |
|                                    | 5290.0 to  | uW/MHz | 0.159    | 0.133    | 0.123    | Pass   | -     |
|                                    | 5296.7 MHz | MHz    | 5 296.57 | 5 292.04 | 5 292.83 | -      | -     |
|                                    | Limit      | uW/MHz | 2.517    | 3.441    | 3.259    | -      | -     |
|                                    | 5296.7 to  | uW/MHz | 0.091    | 0.096    | 0.110    | Pass   | -     |
|                                    | 5480.0 MHz | MHz    | 5 298.17 | 5 296.88 | 5 297.80 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)



G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드: keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                  |                                                            |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|
|  <b>SongDam Certification Center</b><br>#708, Creation Hall, Yongin Songdam College, 61<br>Dengbu-ro, Cheoln, Yongin, Gyeonggi-do, 17145,<br>Korea<br>Tel: +82-31-333-3220 Fax: +82-31-624-8855 | Report No.:<br>SDCC-2020-00128<br>Page (132) / (135) pages |  |
|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 42       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5210     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx2) | 5020.0 to  | uW/MHz | 0.015    | 0.016    | 0.013    | Pass   | -     |
|                                    | 5123.2 MHz | MHz    | 5 118.35 | 5 118.45 | 5 121.65 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5123.2 to  | uW/MHz | 0.050    | 0.047    | 0.050    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 145.60 | 5 143.30 | 5 135.55 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 24.397   | 24.788   | 24.377   | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.04 | 5 250.05 | 5 250.03 | -      | -     |
|                                    | Limit      | uW/MHz | 228.003  | 222.813  | 233.314  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 5.757    | 6.073    | 5.306    | Pass   | -     |
|                                    | 5290.0 MHz | MHz    | 5 251.00 | 5 251.00 | 5 251.08 | -      | -     |
|                                    | Limit      | uW/MHz | 25.000   | 25.000   | 24.906   | -      | -     |
|                                    | 5290.0 to  | uW/MHz | 0.068    | 0.075    | 0.073    | Pass   | -     |
|                                    | 5296.7 MHz | MHz    | 5 291.79 | 5 295.49 | 5 292.51 | -      | -     |
|                                    | Limit      | uW/MHz | 3.501    | 2.712    | 3.332    | -      | -     |
|                                    | 5296.7 to  | uW/MHz | 0.058    | 0.059    | 0.063    | Pass   | -     |
|                                    | 5480.0 MHz | MHz    | 5 385.97 | 5 386.15 | 5 381.20 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

F-TP22-06 (Rev.00)



G4B(www.g4b.go.kr)진위확인코드 : keqzWxQdI30=



# TEST REPORT

|                                                                                                                                                                                                                                                                                                                                 |                                                                                       |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|
|  <p><b>SongDam Certification Center</b><br/>         #708, Creation Hall, YongIn Songdam College, 61<br/>         Dongbu-ro, Cheoin, Yongin, Gyeonggi-do, 17145,<br/>         Korea<br/>         Tel: +82-31-333-3220 Fax: +82-31-824-8855</p> | <p>Report No.:<br/>         SDCC-2020-00128<br/>         Page (133) / (135) pages</p> |  |
|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|---------------------------------------------------------------------------------------|--|

| Channel Number                     |            | ch.    | 42       |          |          | Result | Limit |
|------------------------------------|------------|--------|----------|----------|----------|--------|-------|
| Measurement Frequency              |            | MHz    | 5210     |          |          |        |       |
| Voltage                            |            | Vdc    | 10.80    | 12.00    | 13.20    | -      | -     |
| Out-Band<br>Leakage<br>Power (Tx3) | 5020.0 to  | uW/MHz | 0.058    | 0.069    | 0.053    | Pass   | -     |
|                                    | 5123.2 MHz | MHz    | 5 122.48 | 5 122.89 | 5 121.55 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |
|                                    | 5123.2 to  | uW/MHz | 0.315    | 0.308    | 0.304    | Pass   | -     |
|                                    | 5150.0 MHz | MHz    | 5 147.40 | 5 147.35 | 5 149.22 | -      | -     |
|                                    | Limit      | uW/MHz | 15.000   | 15.000   | 15.000   | -      | -     |
|                                    | 5250.0 to  | uW/MHz | 25.247   | 25.068   | 24.886   | Pass   | -     |
|                                    | 5251.0 MHz | MHz    | 5 250.02 | 5 250.00 | 5 250.01 | -      | -     |
|                                    | Limit      | uW/MHz | 238.748  | 250.000  | 244.309  | -      | -     |
|                                    | 5251.0 to  | uW/MHz | 7.365    | 6.971    | 7.069    | Pass   | -     |
|                                    | 5290.0 MHz | MHz    | 5 251.00 | 5 251.00 | 5 251.00 | -      | -     |
|                                    | Limit      | uW/MHz | 25.000   | 25.000   | 25.000   | -      | -     |
|                                    | 5290.0 to  | uW/MHz | 0.144    | 0.129    | 0.131    | Pass   | -     |
|                                    | 5296.7 MHz | MHz    | 5 293.87 | 5 293.56 | 5 290.06 | -      | -     |
|                                    | Limit      | uW/MHz | 3.033    | 3.098    | 3.946    | -      | -     |
|                                    | 5296.7 to  | uW/MHz | 0.098    | 0.113    | 0.087    | Pass   | -     |
|                                    | 5480.0 MHz | MHz    | 5 299.08 | 5 298.90 | 5 297.80 | -      | -     |
|                                    | Limit      | uW/MHz | 2.500    | 2.500    | 2.500    | -      | -     |

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G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드 : keqzWxQdI30=



# TEST REPORT

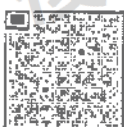


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| Channel Number                                          |            | ch.    | 42        |           |           | Result | Limit |
|---------------------------------------------------------|------------|--------|-----------|-----------|-----------|--------|-------|
| Measurement Frequency                                   |            | MHz    | 5210      |           |           |        |       |
| Voltage                                                 |            | Vdc    | 10.80     | 12.00     | 13.20     | -      | -     |
| Out-Band<br>Leakage<br>Power<br>(Sum)                   | 5020.0 to  | uW/MHz | 0.108     | 0.119     | 0.101     | Pass   | -     |
|                                                         | 5123.2 MHz | MHz    | 5122.480  | 5122.890  | 5121.650  | -      | -     |
|                                                         | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
|                                                         | 5123.2 to  | uW/MHz | 0.504     | 0.521     | 0.528     | Pass   | -     |
|                                                         | 5150.0 MHz | MHz    | 5 149.65  | 5 149.97  | 5 149.22  | -      | -     |
|                                                         | Limit      | uW/MHz | 15.000    | 15.000    | 15.000    | -      | -     |
|                                                         | 5250.0 to  | uW/MHz | 94.066    | 92.457    | 93.700    | Pass   | -     |
|                                                         | 5251.0 MHz | MHz    | 5 250.04  | 5 250.05  | 5 250.05  | -      | -     |
|                                                         | Limit      | uW/MHz | 228.003   | 222.813   | 222.813   | -      | -     |
|                                                         | 5251.0 to  | uW/MHz | 23.099    | 21.877    | 23.050    | Pass   | -     |
|                                                         | 5290.0 MHz | MHz    | 5 251.16  | 5 251.00  | 5 251.12  | -      | -     |
|                                                         | Limit      | uW/MHz | 24.812    | 25.000    | 24.859    | -      | -     |
|                                                         | 5290.0 to  | uW/MHz | 1.575     | 1.488     | 1.340     | Pass   | -     |
|                                                         | 5296.7 MHz | MHz    | 5 296.57  | 5 296.62  | 5 292.83  | -      | -     |
|                                                         | Limit      | uW/MHz | 2.517     | 2.508     | 3.259     | -      | -     |
|                                                         | 5296.7 to  | uW/MHz | 0.260     | 0.279     | 0.270     | Pass   | -     |
|                                                         | 5480.0 MHz | MHz    | 5 385.97  | 5 386.15  | 5 381.20  | -      | -     |
|                                                         | Limit      | uW/MHz | 2.500     | 2.500     | 2.500     | -      | -     |
| Secondary<br>emitted<br>radio wave<br>strength<br>(Tx0) | 30 to      | nW     | 0.354     | 0.320     | 0.306     | Pass   | ≤ 4   |
|                                                         | 1000 MHz   | MHz    | 56.19     | 57.16     | 57.16     | -      | -     |
|                                                         | 1000 to    | nW     | 0.077     | 0.066     | 0.073     | Pass   | ≤ 20  |
|                                                         | 10000 MHz  | MHz    | 7 237.00  | 7 237.00  | 7 237.00  | -      | -     |
|                                                         | 10000 to   | nW     | 0.057     | 0.057     | 0.057     | Pass   | ≤ 20  |
|                                                         | 26000 MHz  | MHz    | 25 664.00 | 23 968.00 | 21 472.00 | -      | -     |

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G4B([www.g4b.go.kr](http://www.g4b.go.kr))진위확인코드 : keqzWxQdI30=



# TEST REPORT

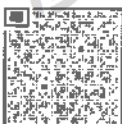


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Report No.:  
 SDCC-2020-00128  
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| Channel Number                              |           | ch. | 42        |           |           | Result | Limit    |
|---------------------------------------------|-----------|-----|-----------|-----------|-----------|--------|----------|
| Measurement Frequency                       |           | MHz | 5210      |           |           |        |          |
| Voltage                                     |           | Vdc | 10.80     | 12.00     | 13.20     | -      | -        |
| Secondary emitted radio wave strength (Tx1) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                             | 1000 MHz  | MHz | 227.88    | 894.27    | 223.03    | -      | -        |
|                                             | 1000 to   | nW  | 0.031     | 0.035     | 0.035     | Pass   | ≤ 20     |
|                                             | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                             | 10000 to  | nW  | 0.047     | 0.055     | 0.048     | Pass   | ≤ 20     |
|                                             | 26000 MHz | MHz | 25 616.00 | 24 000.00 | 25 424.00 | -      | -        |
| Secondary emitted radio wave strength (Tx2) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                             | 1000 MHz  | MHz | 768.17    | 799.21    | 716.76    | -      | -        |
|                                             | 1000 to   | nW  | 0.032     | 0.033     | 0.034     | Pass   | ≤ 20     |
|                                             | 10000 MHz | MHz | 3 619.00  | 3 619.00  | 3 619.00  | -      | -        |
|                                             | 10000 to  | nW  | 0.055     | 0.076     | 0.040     | Pass   | ≤ 20     |
|                                             | 26000 MHz | MHz | 24 192.00 | 25 536.00 | 25 840.00 | -      | -        |
| Secondary emitted radio wave strength (Tx3) | 30 to     | nW  | 0.001     | 0.001     | 0.001     | Pass   | ≤ 4      |
|                                             | 1000 MHz  | MHz | 928.22    | 431.58    | 977.69    | -      | -        |
|                                             | 1000 to   | nW  | 0.017     | 0.018     | 0.021     | Pass   | ≤ 20     |
|                                             | 10000 MHz | MHz | 6 616.00  | 3 709.00  | 7 264.00  | -      | -        |
|                                             | 10000 to  | nW  | 0.060     | 0.050     | 0.052     | Pass   | ≤ 20     |
|                                             | 26000 MHz | MHz | 25 712.00 | 25 744.00 | 25 232.00 | -      | -        |
| Secondary emitted radio wave strength (Sum) | 30 to     | nW  | 0.357     | 0.322     | 0.308     | Pass   | ≤ 4      |
|                                             | 1000 MHz  | MHz | -         | -         | -         | -      | -        |
|                                             | 1000 to   | nW  | 0.157     | 0.152     | 0.162     | Pass   | ≤ 20     |
|                                             | 10000 MHz | MHz | -         | -         | -         | -      | -        |
|                                             | 10000 to  | nW  | 0.220     | 0.239     | 0.196     | Pass   | ≤ 20     |
|                                             | 26000 MHz | MHz | -         | -         | -         | -      | -        |
| Burst Length of Transmitted Signals         |           |     | Good      | Good      | Good      | Pass   | ≤ 4 ms   |
| Carrier Sensing Function                    |           |     | Good      | Good      | Good      | Pass   | 100 mV/m |
| Interference Prevention Function            |           |     | Good      |           |           | Pass   | -        |

F-TP22-06 (Rev.00)



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