

APPLICATION CERTIFICATION FCC Part 15C  
On Behalf of  
SHEN ZHEN FANR TECHNOLOGY CO., LIMITED

Eye Massager Smart Eye  
Model No.: OE-0909

FCC ID: 2ATAW-OE0909

Prepared for : SHEN ZHEN FANR TECHNOLOGY CO., LIMITED  
Address : 6th Floor, Yusheng Building, Huafeng Second Industrial Park,  
Hangcheng Avenue, Xixiang Street, Baoan District, Shenzhen,  
Guangdong, China

Prepared by : Shenzhen Accurate Technology Co., Ltd.  
Address : 1/F., Building A, Changyuan New Material Port, Science & Industry  
Park, Nanshan District, Shenzhen, Guangdong, P.R. China

Tel: (0755) 26503290  
Fax: (0755) 26503396

Report No. : ATE20190617  
Date of Test : May 7-May 15, 2019  
Date of Report : May 16, 2019

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## Test Report Certification

Applicant : SHEN ZHEN FANR TECHNOLOGY CO., LIMITED  
Address : 6th Floor, Yusheng Building, Huafeng Second Industrial Park,  
Hangcheng Avenue, Xixiang Street, Baoan District, Shenzhen,  
Guangdong, China  
EUT Description : Eye Massager Smart Eye  
Model No. : OE-0909

Measurement Procedure Used:

### **FCC Rules and Regulations Part 15 Subpart C Section 15.247 ANSI C63.10: 2013**

The device described above is tested by Shenzhen Accurate Technology Co., Ltd. to determine the maximum emission levels emanating from the device. The maximum emission levels are compared to the FCC Part 15 Subpart C Section 15.247 limits. The measurement results are contained in this test report and Shenzhen Accurate Technology Co., Ltd. is assumed full responsibility for the accuracy and completeness of these measurements. Also, this report shows that the Equipment Under Test (EUT) is to be technically compliant with the FCC requirements.

This report applies to above tested sample only. This report shall not be reproduced in part without written approval of Shenzhen Accurate Technology Co., Ltd.

Date of Test : May 7-May 15, 2019  
Date of Report : May 16, 2019

Test Engineer :   
(Frank Lü, Engineer)

Prepared by :   
(Steven Yang, Engineer)

Approved & Authorized Signer :   
(Sean Liu, Manager)

## 1. GENERAL INFORMATION

### 1.1. Description of Device (EUT)

|                    |   |                                                                                                                                                 |
|--------------------|---|-------------------------------------------------------------------------------------------------------------------------------------------------|
| Model Number       | : | OE-0909                                                                                                                                         |
| Bluetooth version  | : | V4.2 (BR+EDR)                                                                                                                                   |
| Frequency Range    | : | 2402MHz-2480MHz                                                                                                                                 |
| Number of Channels | : | 79                                                                                                                                              |
| Antenna Gain(Max)  | : | -0.68dBi                                                                                                                                        |
| Antenna type       | : | PCB antenna                                                                                                                                     |
| Modulation mode    | : | GFSK, $\pi/4$ DQPSK                                                                                                                             |
| Hardware version   | : | V1.3                                                                                                                                            |
| Software version   | : | V1.0                                                                                                                                            |
| Trade Mark         | : | OGAWA                                                                                                                                           |
| Power Supply       | : | DC 3.7V (Powered by Lithium battery) or<br>DC 5V (Powered by charging port)                                                                     |
| Applicant          | : | SHEN ZHEN FANR TECHNOLOGY CO., LIMITED                                                                                                          |
| Address            | : | 6th Floor, Yusheng Building, Huafeng Second Industrial<br>Park, Hangcheng Avenue, Xixiang Street, Baoan District,<br>Shenzhen, Guangdong, China |
| Manufacturer       | : | SHEN ZHEN FANR TECHNOLOGY CO., LIMITED                                                                                                          |
| Address            | : | 6th Floor, Yusheng Building, Huafeng Second Industrial<br>Park, Hangcheng Avenue, Xixiang Street, Baoan District,<br>Shenzhen, Guangdong, China |

### 1.2. Accessory and Auxiliary Equipment

|                                                  |   |                              |
|--------------------------------------------------|---|------------------------------|
| AC/DC Power Adapter:<br>(provided by laboratory) | : | Model: TEKA006-0501000UKU    |
|                                                  |   | Input: 100-240V~50/60Hz 0.3A |
|                                                  |   | Output: DC 5V/1A             |

### 1.3. Description of Test Facility

EMC Lab : Recognition of accreditation by Federal Communications Commission (FCC)  
The Designation Number is CN1189  
The Registration Number is 708358

Listed by Innovation, Science and Economic Development Canada (ISED)  
The Registration Number is 5077A-2

Accredited by China National Accreditation Service for Conformity Assessment (CNAS)  
The Registration Number is CNAS L3193

Accredited by American Association for Laboratory Accreditation (A2LA)  
The Certificate Number is 4297.01

Name of Firm : Shenzhen Accurate Technology Co., Ltd.

Site Location : 1/F., Building A, Changyuan New Material Port, Science & Industry Park, Nanshan District, Shenzhen, Guangdong, P.R. China

### 1.4. Measurement Uncertainty

Conducted Emission Expanded Uncertainty = 2.23dB, k=2

Radiated emission expanded uncertainty (9kHz-30MHz) = 3.08dB, k=2

Radiated emission expanded uncertainty (30MHz-1000MHz) = 4.42dB, k=2

Radiated emission expanded uncertainty (Above 1GHz) = 4.06dB, k=2

## 2. MEASURING DEVICE AND TEST EQUIPMENT

**Table 1: List of Test and Measurement Equipment**

| Kind of equipment           | Manufacturer           | Type                               | S/N       | Calibrated dates | Calibrated until |
|-----------------------------|------------------------|------------------------------------|-----------|------------------|------------------|
| EMI Test Receiver           | Rohde&Schwarz          | ESCS30                             | 100307    | Jan. 05, 2019    | 1 Year           |
| EMI Test Receiver           | Rohde& Schwarz         | ESR                                | 101817    | Jan. 05, 2019    | 1 Year           |
| Spectrum Analyzer           | Rohde&Schwarz          | FSV40                              | 101495    | Jan. 05, 2019    | 1 Year           |
| Pre-Amplifier               | Compliance Direction   | RSU-M2                             | 38322     | Jan. 05, 2019    | 1 Year           |
| Pre-Amplifier               | Agilent                | 8447D                              | 294A10619 | Jan. 05, 2019    | 1 Year           |
| Loop Antenna                | Schwarzbeck            | FMZB1516                           | 1516131   | Jan. 05, 2019    | 1 Year           |
| Bilog Antenna               | Schwarzbeck            | VULB9163                           | 9163-323  | Jan. 05, 2019    | 1 Year           |
| Horn Antenna                | Schwarzbeck            | BBHA9120D                          | 9120D-655 | Jan. 05, 2019    | 1 Year           |
| Horn Antenna                | Schwarzbeck            | BBHA9170                           | 9170-359  | Jan. 05, 2019    | 1 Year           |
| LISN                        | Schwarzbeck            | NSLK8126                           | 8126431   | Jan. 05, 2019    | 1 Year           |
| Highpass Filter             | Wainwright Instruments | WHKX3.6/18G-10S S                  | N/A       | Jan. 05, 2019    | 1 Year           |
| Band Reject Filter          | Wainwright Instruments | WRCG2400/2485-2375/2510-60/11SS    | N/A       | Jan. 05, 2019    | 1 Year           |
| RF Coaxial Cable            | SUHNER                 | N-5m(Frequency range:9KHz-26.5GHz) | NO.3      | Jan. 05, 2019    | 1 Year           |
| RF Coaxial Cable            | SUHNER                 | N-5m(Frequency range:9KHz-26.5GHz) | NO.4      | Jan. 05, 2019    | 1 Year           |
| RF Coaxial Cable            | SUHNER                 | N-1m(Frequency range:9KHz-26.5GHz) | NO.5      | Jan. 05, 2019    | 1 Year           |
| RF Coaxial Cable            | SUHNER                 | N-1m(Frequency range:9KHz-26.5GHz) | NO.6      | Jan. 05, 2019    | 1 Year           |
| Temporary antenna connector | NTGS                   | 14AE                               | N/A       | May 13, 2019     | N/A              |

Note: The temporary antenna connector is soldered on the PCB board in order to perform conducted tests and this temporary antenna connector is listed in the equipment list.

### 3. OPERATION OF EUT DURING TESTING

#### 3.1. Operating Mode

The mode is used: Transmitting mode

Low Channel: 2402MHz

Middle Channel: 2441MHz

High Channel: 2480MHz

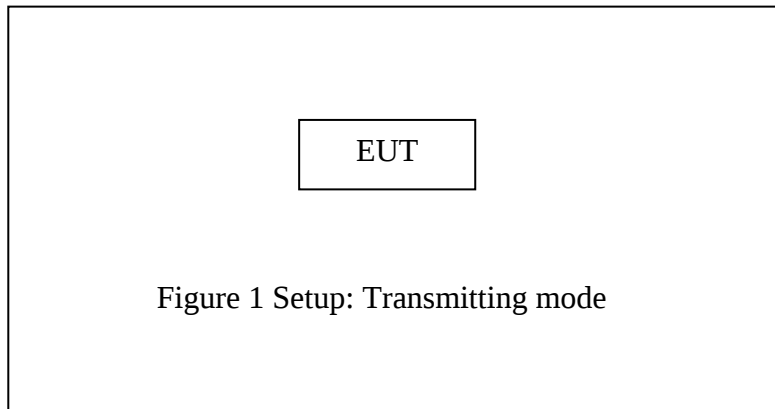
Hopping

Note: The equipment under test (EUT) was tested under fully-charged battery.  
The Bluetooth has been tested under continuous transmission mode.

EUT is connected to a computer through the usb-serial controller tool and Use test software to set the test mode.

Test software is (FCCAssist\_2.4)

#### 3.2. Configuration and peripherals



## 4. FREQUENCY HOPPING SYSTEM REQUIREMENTS

### 4.1. Standard and Limit

According to FCC Part 15.247(a)(1), The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

(g) Frequency hopping spread spectrum systems are not required to employ all available hopping channels during each transmission. However, the system, consisting of both the transmitter and the receiver, must be designed to comply with all of the regulations in this section should the transmitter be presented with a continuous data (or information) stream. In addition, a system employing short transmission bursts must comply with the definition of a frequency hopping system and must distribute its transmissions over the minimum number of hopping channels specified in this section.

(h) The incorporation of intelligence within a frequency hopping spread spectrum system that permits the system to recognize other users within the spectrum band so that it individually and independently chooses and adapts its hop sets to avoid hopping on occupied channels is permitted. The coordination of frequency hopping systems in any other manner for the express purpose of avoiding the simultaneous occupancy of individual hopping frequencies by multiple transmitters is not permitted.

### 4.2. EUT Pseudorandom Frequency Hopping Sequence

Pseudorandom Frequency Hopping Sequence Table as below:

Channel: 08, 24, 40, 56, 34, 51, 72, 09, 01, 64, 22, 33, 41, 32, 47, 65, 73, 53, 69, 06, 17, 04, 20, 36, 52, 38, 66, 70, 78, 68, 76, 21, 29, 10, 26, 49, 00, 58, 44, 59, 75, 13, 03, 14, 11, 35, 43, 37, 50, 61, 77, 55, 71, 02, 23, 07, 27, 39, 54, 46, 48, 15, 63, 62, 67, 25, 31, 12, 28, 19, 60, 42, 57, 74, 16, 05, 18, 30, 45, etc.

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

### 4.3.Frequency Hopping System

This transmitter device is frequency hopping device, and complies with FCC part 15.247 rule.

This device uses Bluetooth radio which operates in 2400-2483.5 MHz band. Bluetooth uses a radio technology called frequency-hopping spread spectrum, which chops up the data being sent and transmits chunks of it on up to 79 bands (1 MHz each; centred from 2402 to 2480 MHz) in the range 2,400-2,483.5MHz. The transmitter switches hop frequencies 1,600 times per second to assure a high degree of data security. All Bluetooth devices participating in a given piconet are synchronized to the frequency-hopping channel for the piconet. The frequency hopping sequence is determined by the master's device address and the phase of the hopping sequence (the frequency to hop at a specific time) is determined by the master's internal clock. Therefore, all slaves in a piconet must know the master's device address and must synchronize their clocks with the master's clock.

Adaptive Frequency Hopping (AFH) was introduced in the Bluetooth specification to provide an effective way for a Bluetooth radio to counteract normal interference. AFH identifies "bad" channels, where either other wireless devices are interfering with the Bluetooth signal or the Bluetooth signal is interfering with another device. The AFH-enabled Bluetooth device will then communicate with other devices within its piconet to share details of any identified bad channels. The devices will then switch to alternative available "good" channels, away from the areas of interference, thus having no impact on the bandwidth used.

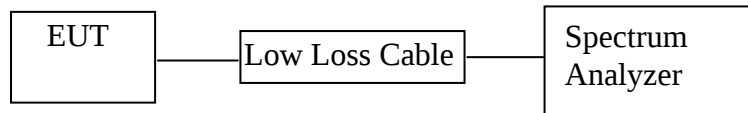
This device was tested with a bluetooth system receiver to check that the device maintained hopping synchronization, and the device complied with these requirements FCC Part 15.247 rule.

## 5. TEST PROCEDURES AND RESULTS

| FCC Rules                           | Description of Test                              | Result    |
|-------------------------------------|--------------------------------------------------|-----------|
| Section 15.247(a)(1)                | 20dB Bandwidth Test                              | Compliant |
| Section 15.247(a)(1)                | Carrier Frequency Separation Test                | Compliant |
| Section 15.247(a)(1)(iii)           | Number Of Hopping Frequency Test                 | Compliant |
| Section 15.247(a)(1)(iii)           | Dwell Time Test                                  | Compliant |
| Section 15.247(b)(1)                | Maximum Peak Output Power Test                   | Compliant |
| Section 15.247(d)<br>Section 15.209 | Radiated Emission Test                           | Compliant |
| Section 15.247(d)                   | Band Edge Compliance Test                        | Compliant |
| Section 15.207                      | AC Power Line Conducted Emissions<br>Limits Test | Compliant |
| Section 15.203                      | Antenna Requirement                              | Compliant |

## 6. 20DB BANDWIDTH TEST

### 6.1. Block Diagram of Test Setup



### 6.2. The Requirement For Section 15.247(a)(1)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater.

### 6.3. EUT Configuration on Measurement

The equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 6.4. Operating Condition of EUT

6.4.1. Setup the EUT and simulator as shown as Section 6.1.

6.4.2. Turn on the power of all equipment.

6.4.3. Let the EUT work in TX (Hopping off) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, and 2480MHz TX frequency to transmit.

### 6.5. Test Procedure

6.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

6.5.2. The nominal IF filter bandwidth (3 dB RBW) shall be in the range of 1% to 5% of the OBW, and VBW shall be approximately three times the RBW.

6.5.3. The 20dB bandwidth is defined as the total spectrum the power of which is higher than peak power minus 20dB.

## 6.6. Test Result

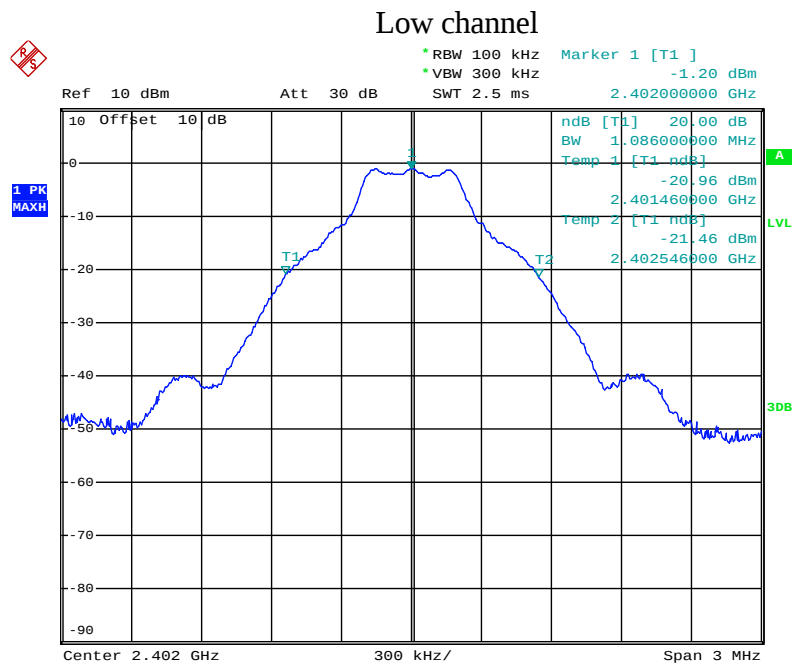
Test Lab: Shielding room

Test Engineer: Frank

| Channel | Frequency (MHz) | GFSK 20dB Bandwidth (MHz) | $\Pi/4$ -DQPSK 20dB Bandwidth (MHz) | Result |
|---------|-----------------|---------------------------|-------------------------------------|--------|
| Low     | 2402            | 1.086                     | 1.362                               | Pass   |
| Middle  | 2441            | 1.092                     | 1.374                               | Pass   |
| High    | 2480            | 1.086                     | 1.368                               | Pass   |

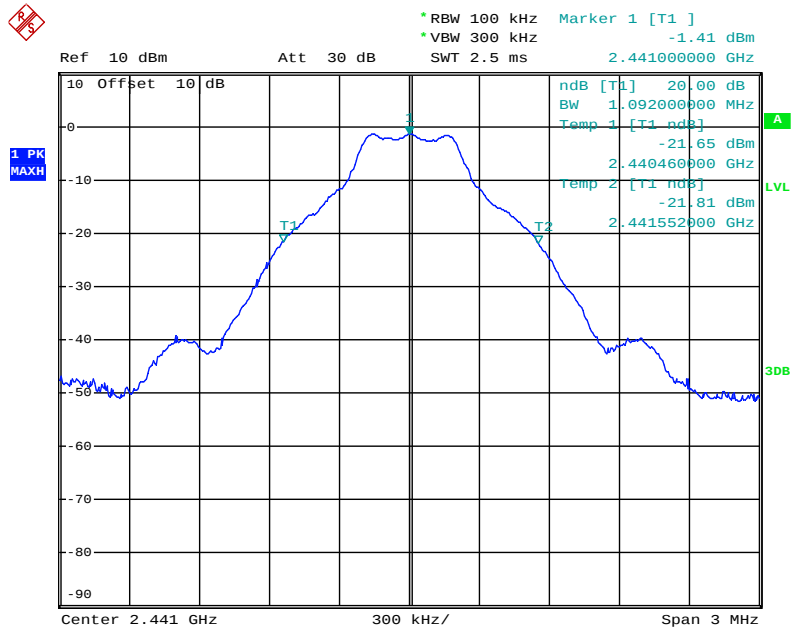
The spectrum analyzer plots are attached as below.

### GFSK Mode



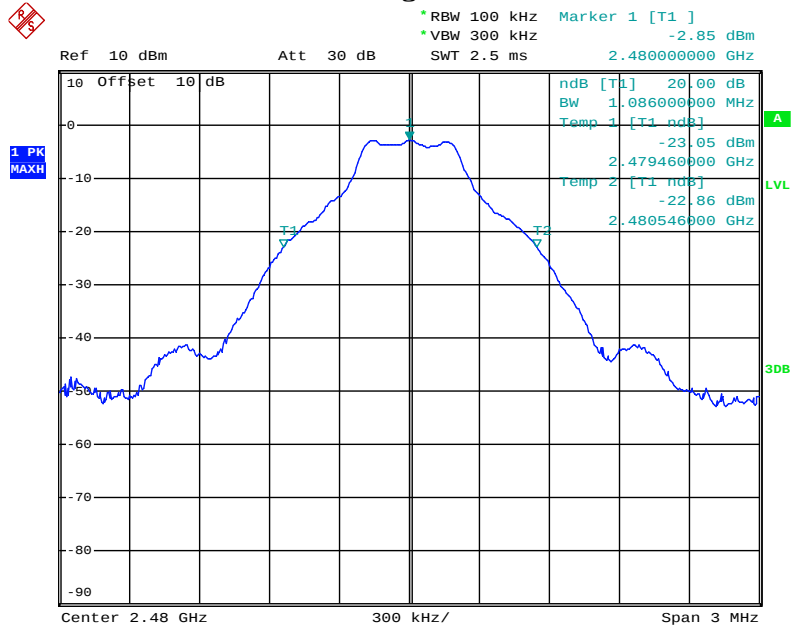
Date: 13.MAY.2019 10:46:28

## Middle channel



Date: 13.MAY.2019 10:48:35

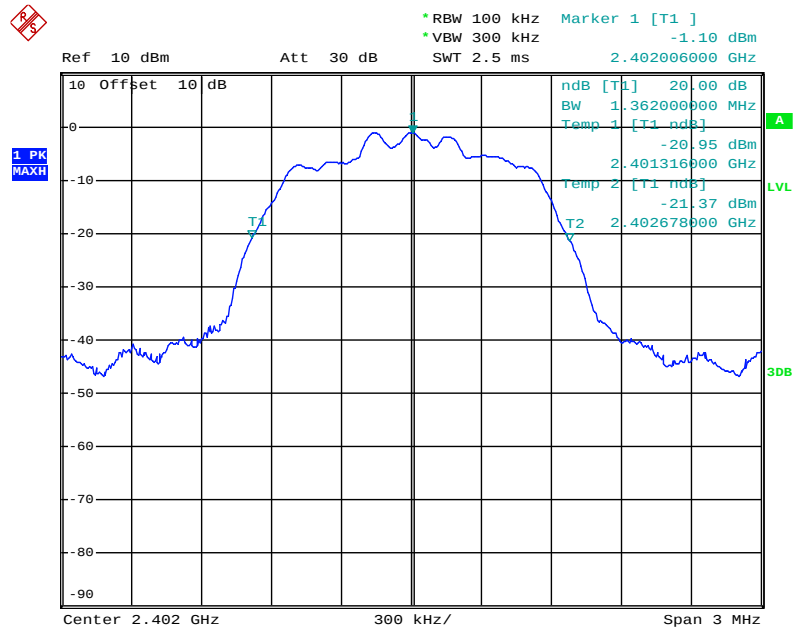
## High channel



Date: 13.MAY.2019 10:50:13

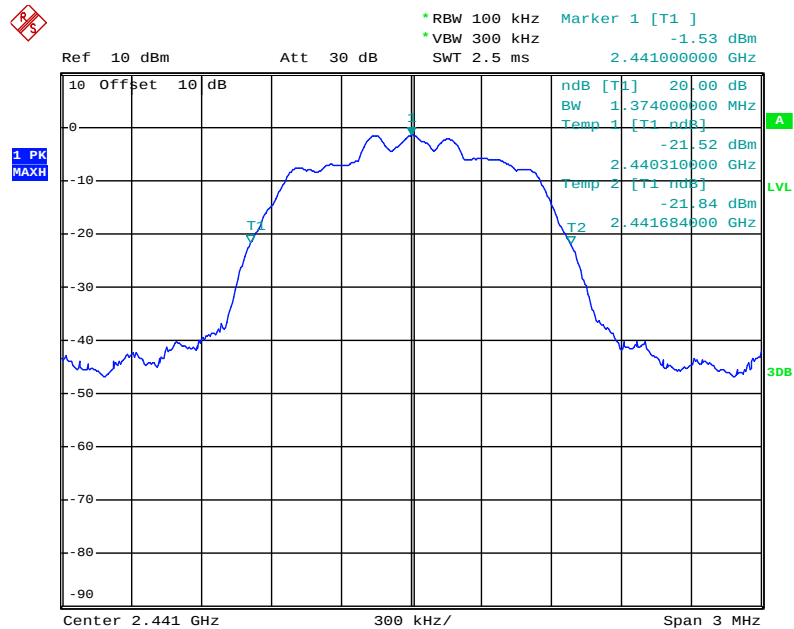
## Π/4-DQPSK Mode

### Low channel

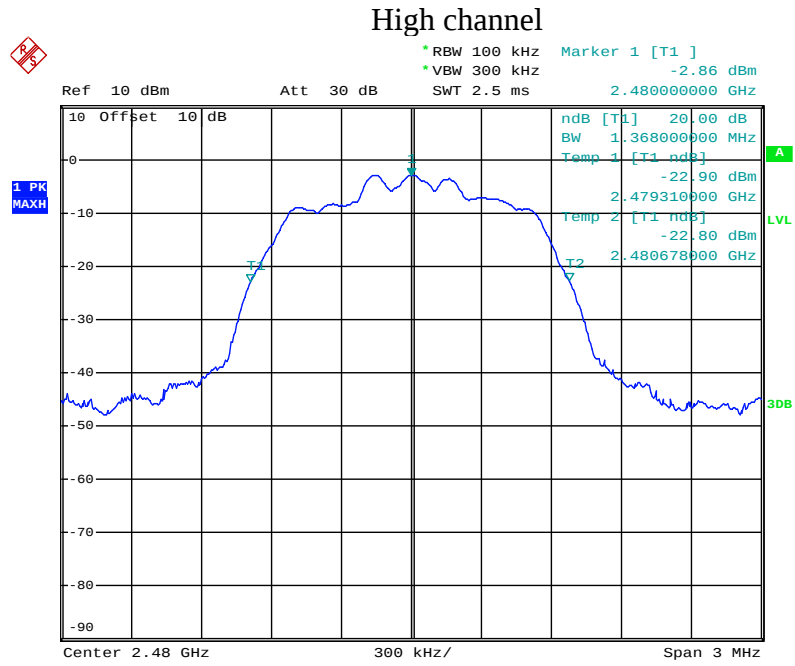


Date: 13.MAY.2019 10:54:10

### Middle channel



Date: 13.MAY.2019 10:52:30



Date: 13.MAY.2019 10:51:16

## 7. CARRIER FREQUENCY SEPARATION TEST

### 7.1. Block Diagram of Test Setup



### 7.2. The Requirement For Section 15.247(a)(1)

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hopping channel, whichever is greater. Alternatively, frequency hopping systems operating in the 2400-2483.5 MHz band may have hopping channel carrier frequencies that are separated by 25 kHz or two-thirds of the 20 dB bandwidth of the hopping channel, whichever is greater, provided the systems operate with an output power no greater than 125 mW. The system shall hop to channel frequencies that are selected at the system hopping rate from a pseudo randomly ordered list of hopping frequencies. Each frequency must be used equally on the average by each transmitter. The system receivers shall have input bandwidths that match the hopping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

### 7.3. EUT Configuration on Measurement

The equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 7.4. Operating Condition of EUT

7.4.1. Setup the EUT and simulator as shown as Section 7.1.

7.4.2. Turn on the power of all equipment.

7.4.3. Let the EUT work in TX (Hopping on) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, and 2480MHz TX frequency to transmit.

## 7.5. Test Procedure

7.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

7.5.2. Set RBW of spectrum analyzer to 30 kHz and VBW to 100 kHz. Adjust Span to 3 MHz.

7.5.3. Set the adjacent channel of the EUT Maxhold another trace.

7.5.4. Measurement the channel separation

## 7.6. Test Result

Test Lab: Shielding room

Test Engineer: Star

### GFSK

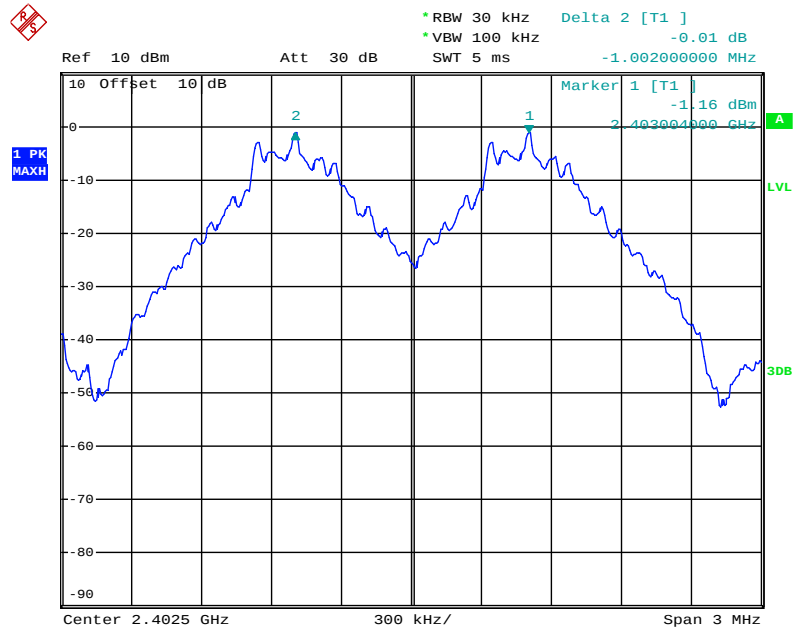
| Channel | Frequency (MHz) | Channel Separation(MHz) | Limit (MHz)                 | Result |
|---------|-----------------|-------------------------|-----------------------------|--------|
| Low     | 2402            | 1.002                   | 25KHz or 2/3*20dB bandwidth | Pass   |
|         | 2403            |                         |                             |        |
| Middle  | 2440            | 1.002                   | 25KHz or 2/3*20dB bandwidth | Pass   |
|         | 2441            |                         |                             |        |
| High    | 2479            | 0.996                   | 25KHz or 2/3*20dB bandwidth | Pass   |
|         | 2480            |                         |                             |        |

### Π/4-DQPSK

| Channel | Frequency (MHz) | Channel Separation(MHz) | Limit (MHz)                 | Result |
|---------|-----------------|-------------------------|-----------------------------|--------|
| Low     | 2402            | 0.996                   | 25KHz or 2/3*20dB bandwidth | Pass   |
|         | 2403            |                         |                             |        |
| Middle  | 2440            | 1.002                   | 25KHz or 2/3*20dB bandwidth | Pass   |
|         | 2441            |                         |                             |        |
| High    | 2479            | 0.996                   | 25KHz or 2/3*20dB bandwidth | Pass   |
|         | 2480            |                         |                             |        |

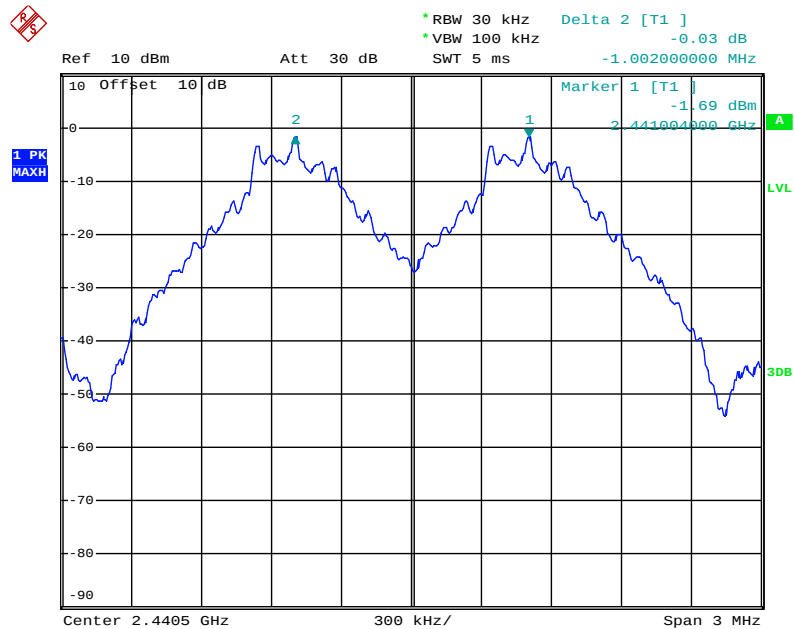
## GFSK Mode

### Low channel

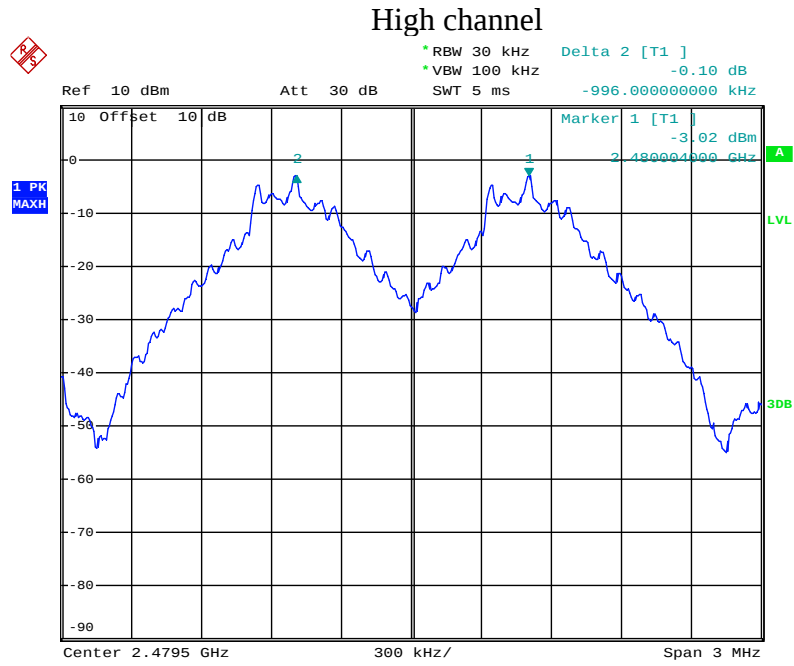


Date: 13.MAY.2019 11:47:02

### Middle channel

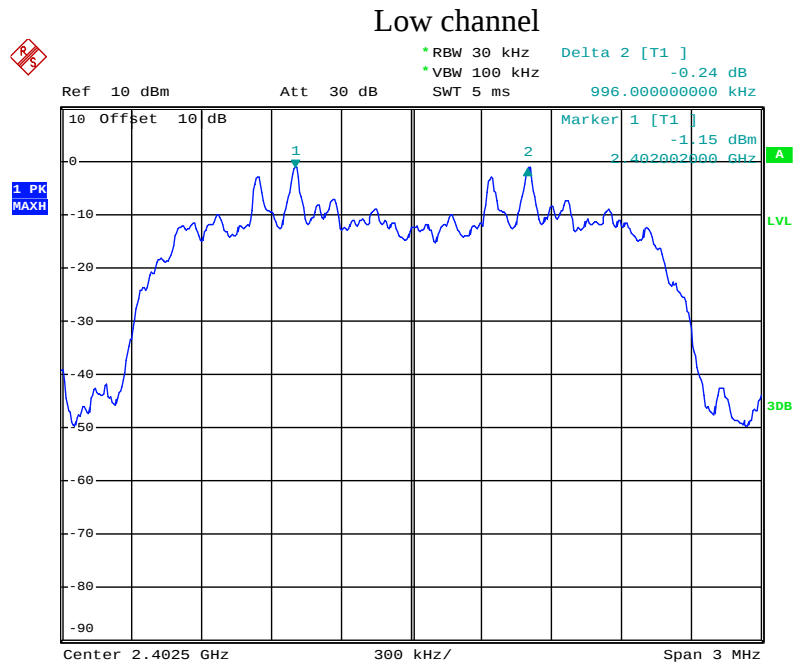


Date: 13.MAY.2019 11:46:17



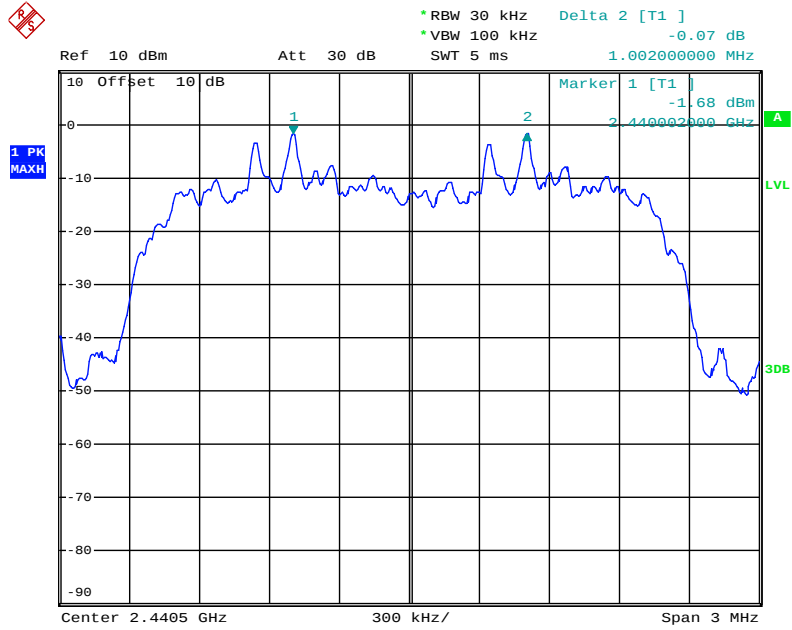
Date: 13.MAY.2019 11:45:38

## Π/4-DQPSK Mode



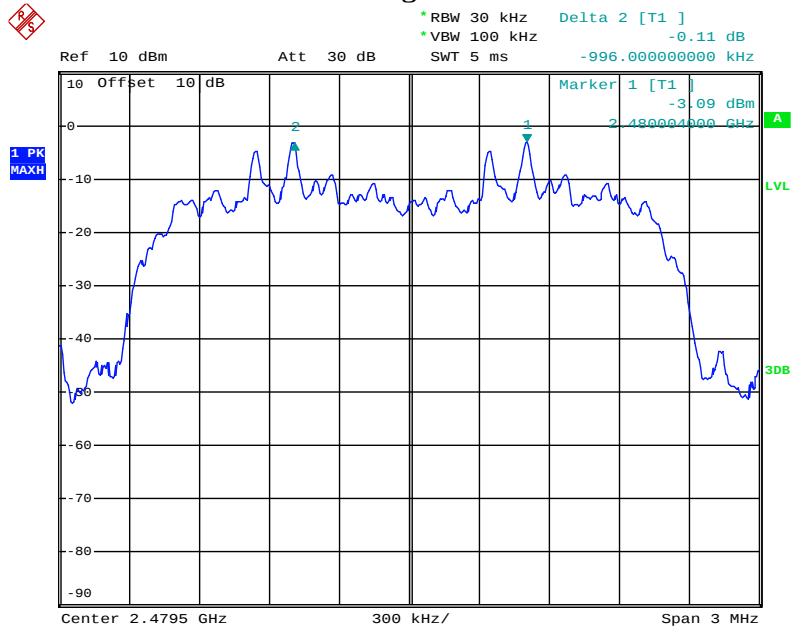
Date: 13.MAY.2019 11:42:48

## Middle channel



Date: 13.MAY.2019 11:44:15

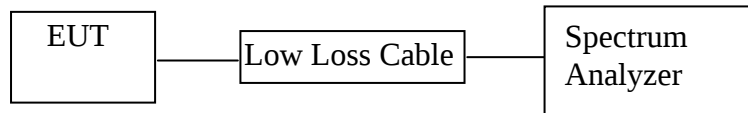
## High channel



Date: 13.MAY.2019 11:44:56

## 8. NUMBER OF HOPPING FREQUENCY TEST

### 8.1. Block Diagram of Test Setup



### 8.2. The Requirement For Section 15.247(a)(1)(iii)

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

### 8.3. EUT Configuration on Measurement

The equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 8.4. Operating Condition of EUT

8.4.1. Setup the EUT and simulator as shown as Section 8.1.

8.4.2. Turn on the power of all equipment.

8.4.3. Let the EUT work in TX (Hopping on) modes measure it.

### 8.5. Test Procedure

8.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

8.5.2. Set the spectrum analyzer as RBW=100 kHz, VBW=300 kHz.

8.5.3. Max hold, view and count how many channel in the band.

## 8.6.Test Result

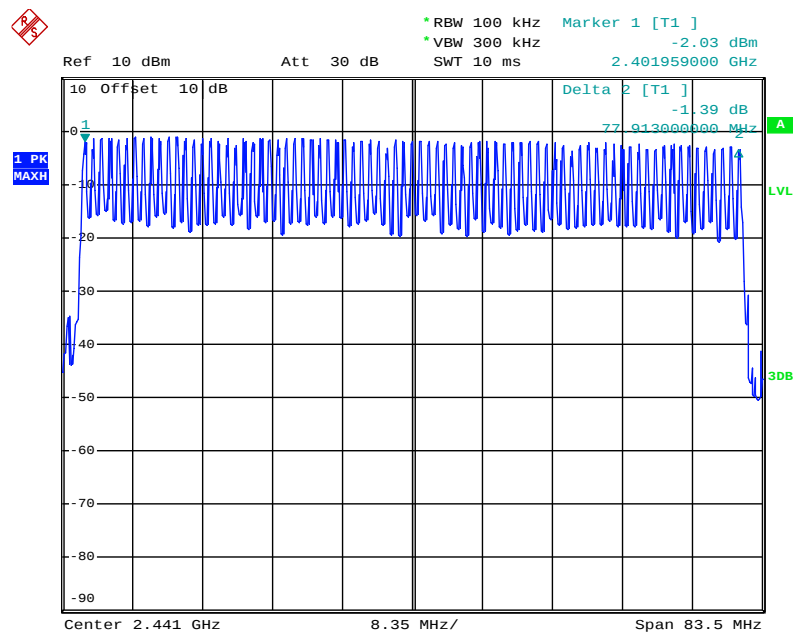
Test Lab: Shielding room

Test Engineer: Frank

| Total number of hopping channel | Measurement result(CH) | Limit(CH) | Result |
|---------------------------------|------------------------|-----------|--------|
|                                 | 79                     | $\geq 15$ | Pass   |

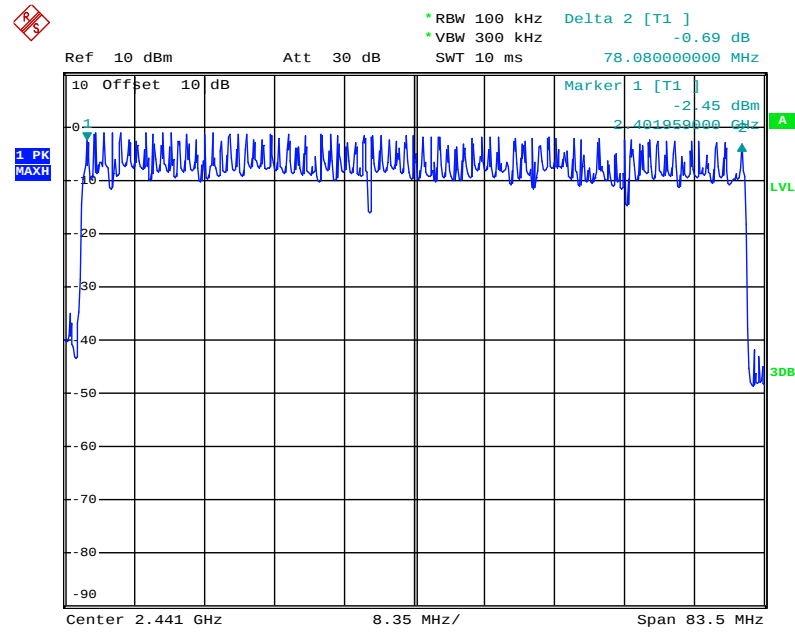
The spectrum analyzer plots are attached as below.

Number of hopping channels (GFSK Mode)



Date: 13.MAY.2019 11:22:14

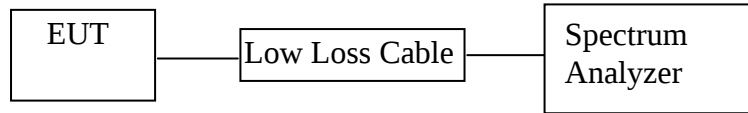
# Number of hopping channels ( $\Pi/4$ -DQPSK Mode)



Date: 13.MAY.2019 11:23:35

## 9. DWELL TIME TEST

### 9.1. Block Diagram of Test Setup



### 9.2. The Requirement For Section 15.247(a)(1)(iii)

Frequency hopping systems in the 2400-2483.5 MHz band shall use at least 15 channels. The average time of occupancy on any channel shall not be greater than 0.4 seconds within a period of 0.4 seconds multiplied by the number of hopping channels employed. Frequency hopping systems may avoid or suppress transmissions on a particular hopping frequency provided that a minimum of 15 channels are used.

### 9.3. EUT Configuration on Measurement

The equipment are installed on the emission measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 9.4. Operating Condition of EUT

9.4.1. Setup the EUT and simulator as shown as Section 9.1.

9.4.2. Turn on the power of all equipment.

9.4.3. Let the EUT work in TX (Hopping on) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, and 2480MHz TX frequency to transmit.

### 9.5. Test Procedure

9.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

9.5.2. Set center frequency of spectrum analyzer = operating frequency.

9.5.3. Set the spectrum analyzer as RBW=1MHz, VBW=3MHz, Span=0Hz, Adjust Sweep=5ms, 10ms, 15ms. Get the pulse time.

9.5.4. Repeat above procedures until all frequency measured were complete.

## 9.6. Test Result

Test Lab: Shielding room

Test Engineer: Frank

### GFSK Mode (Worse case)

| Mode                                                                                                              | Channel Frequency (MHz) | Pulse Time (ms) | Dwell Time (ms) | Limit (ms) |
|-------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------|-----------------|------------|
| DH1                                                                                                               | 2441                    | 0.430           | 137.6           | 400        |
| A period transmit time = $0.4 \times 79 = 31.6$ Dwell time = pulse time $\times (1600/(2 \times 79)) \times 31.6$ |                         |                 |                 |            |
| DH3                                                                                                               | 2441                    | 1.690           | 270.4           | 400        |
| A period transmit time = $0.4 \times 79 = 31.6$ Dwell time = pulse time $\times (1600/(4 \times 79)) \times 31.6$ |                         |                 |                 |            |
| DH5                                                                                                               | 2441                    | 2.990           | 218.9           | 400        |
| A period transmit time = $0.4 \times 79 = 31.6$ Dwell time = pulse time $\times (1600/(6 \times 79)) \times 31.6$ |                         |                 |                 |            |

### Π/4-DQPSK Mode (Worse case)

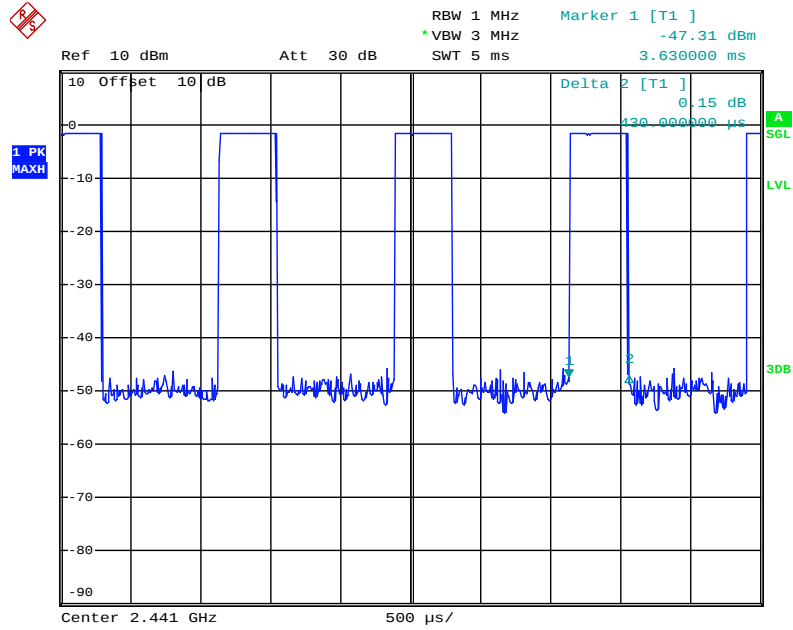
| Mode                                                                                                              | Channel Frequency (MHz) | Pulse Time (ms) | Dwell Time (ms) | Limit (ms) |
|-------------------------------------------------------------------------------------------------------------------|-------------------------|-----------------|-----------------|------------|
| 2-DH1                                                                                                             | 2441                    | 0.440           | 140.8           | 400        |
| A period transmit time = $0.4 \times 79 = 31.6$ Dwell time = pulse time $\times (1600/(2 \times 79)) \times 31.6$ |                         |                 |                 |            |
| 2-DH3                                                                                                             | 2441                    | 1.720           | 275.2           | 400        |
| A period transmit time = $0.4 \times 79 = 31.6$ Dwell time = pulse time $\times (1600/(4 \times 79)) \times 31.6$ |                         |                 |                 |            |
| 2-DH5                                                                                                             | 2441                    | 2.980           | 217.9           | 400        |
| A period transmit time = $0.4 \times 79 = 31.6$ Dwell time = pulse time $\times (1600/(6 \times 79)) \times 31.6$ |                         |                 |                 |            |

Note: We tested GFSK mode and Π/4-DQPSK mode the low, middle and high channel and recorded the worse case data for all test mode.

The spectrum analyzer plots are attached as below.

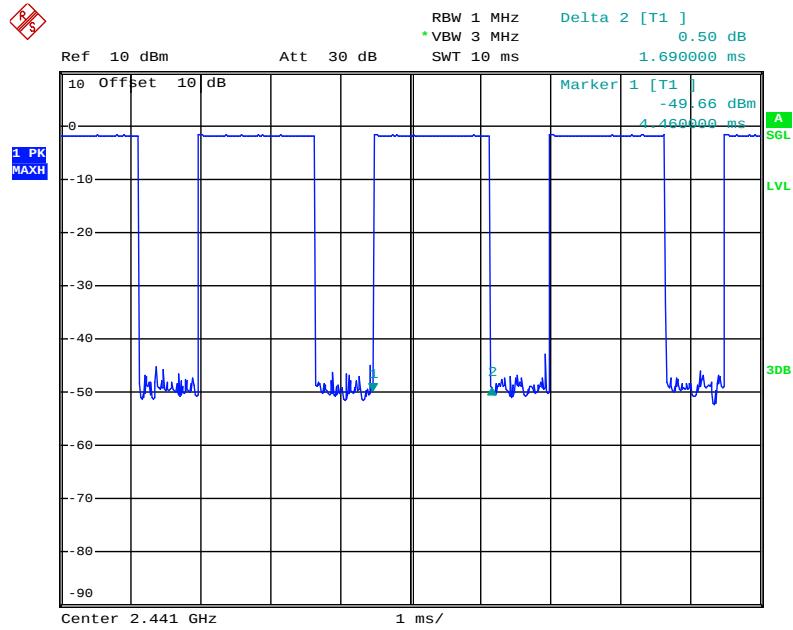
## GFSK Mode

### DH1 Middle channel



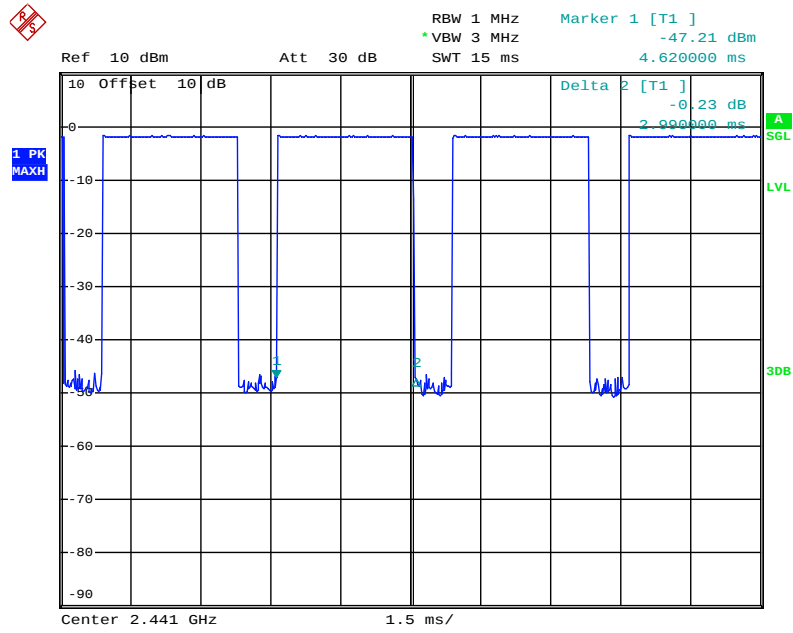
Date: 13.MAY.2019 13:44:30

### DH3 Middle channel



Date: 13.MAY.2019 13:44:03

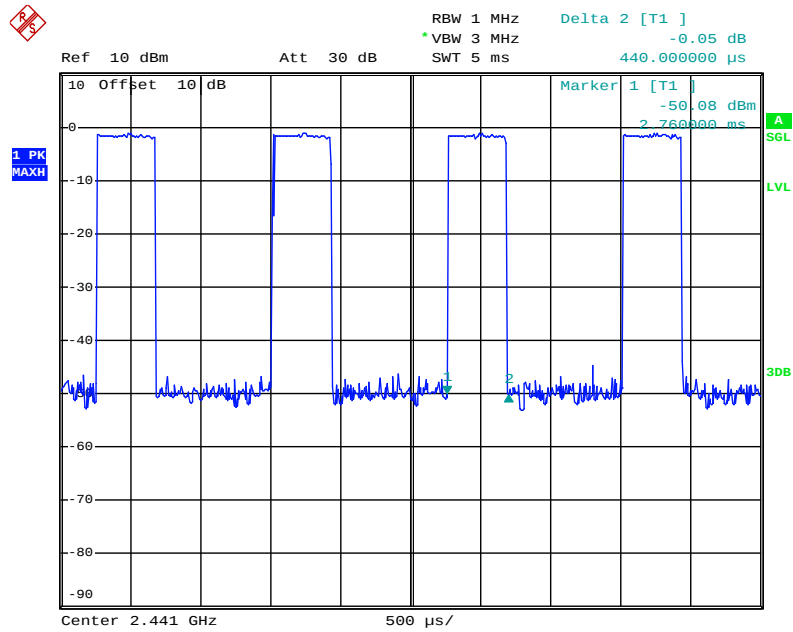
### DH5 Middle channel



Date: 13.MAY.2019 13:43:40

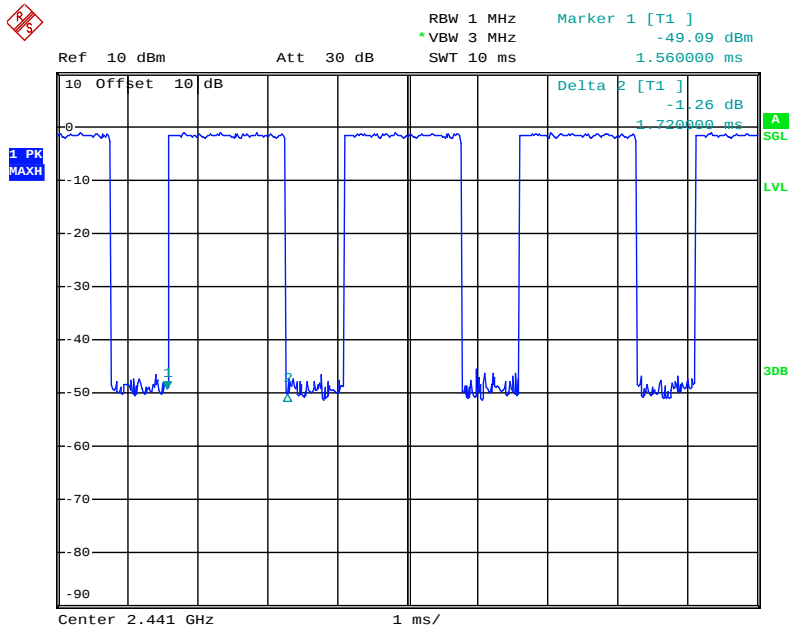
### Π/4-DQPSK Mode

### 2-DH1 Middle channel



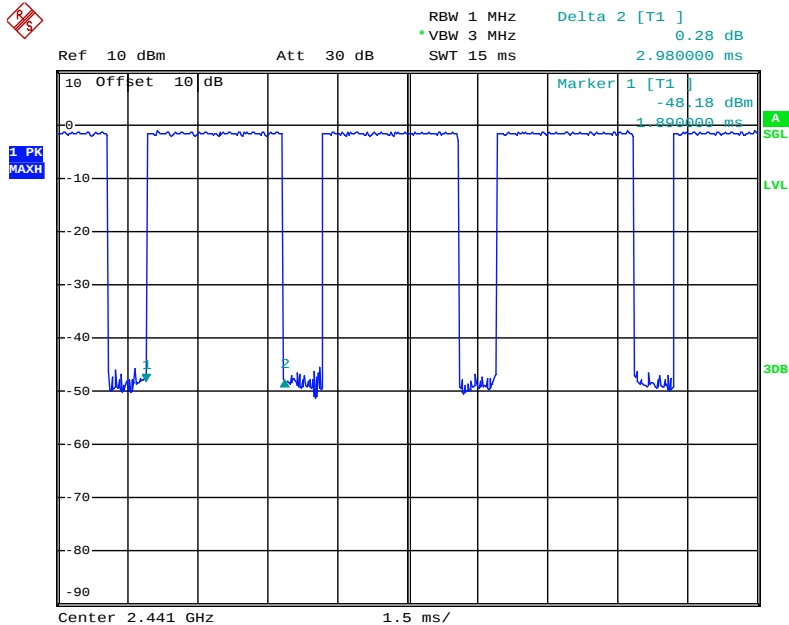
Date: 13.MAY.2019 13:48:07

## 2-DH3 Middle channel



Date: 13.MAY.2019 13:48:33

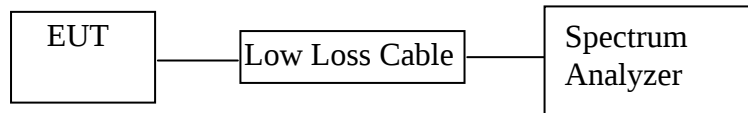
## 2-DH5 Middle channel



Date: 13.MAY.2019 13:49:08

## 10. MAXIMUM PEAK OUTPUT POWER TEST

### 10.1. Block Diagram of Test Setup



### 10.2. The Requirement For Section 15.247(b)(1)

For frequency hopping systems operating in the 2400-2483.5 MHz band employing at least 75 non-overlapping hopping channels, and all frequency hopping systems in the 5725-5850 MHz band: 1 watt. For all other frequency hopping systems in the 2400-2483.5 MHz band: 0.125 watts.

### 10.3. EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 10.4. Operating Condition of EUT

10.4.1. Setup the EUT and simulator as shown as Section 10.1.

10.4.2. Turn on the power of all equipment.

10.4.3. Let the EUT work in TX (Hopping off) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, and 2480MHz TX frequency to transmit.

### 10.5. Test Procedure

10.5.1. The transmitter output was connected to the spectrum analyzer through a low loss cable.

10.5.2. Set RBW of spectrum analyzer to 3MHz and VBW to 3MHz.

10.5.3. Measurement the maximum peak output power.

## 10.6.Test Result

Test Lab: Shielding room

Test Engineer: Frank

### GFSK Mode

| Channel | Frequency (MHz) | Peak Output Power (dBm/W) | Limits (dBm/W) | Result |
|---------|-----------------|---------------------------|----------------|--------|
| Low     | 2402            | -0.35/0.0009              | 21 / 0.125     | Pass   |
| Middle  | 2441            | -0.90/0.0008              | 21 / 0.125     | Pass   |
| High    | 2480            | -2.36/0.0006              | 21 / 0.125     | Pass   |

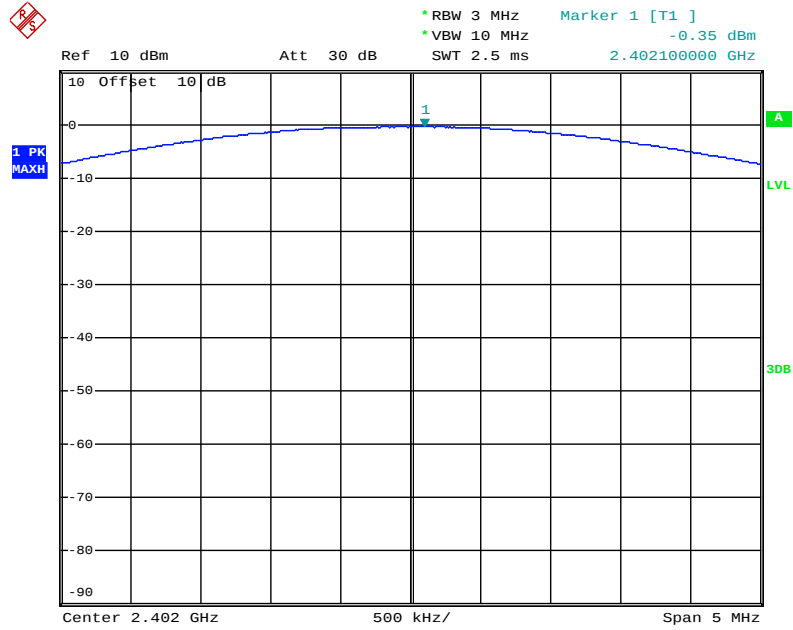
### II/4-DQPSK Mode

| Channel | Frequency (MHz) | Peak Output Power (dBm/W) | Limits (dBm/W) | Result |
|---------|-----------------|---------------------------|----------------|--------|
| Low     | 2402            | 0.44/0.0011               | 21 / 0.125     | Pass   |
| Middle  | 2441            | 0.14/0.0010               | 21 / 0.125     | Pass   |
| High    | 2480            | -1.24/0.0008              | 21 / 0.125     | Pass   |

The spectrum analyzer plots are attached as below.

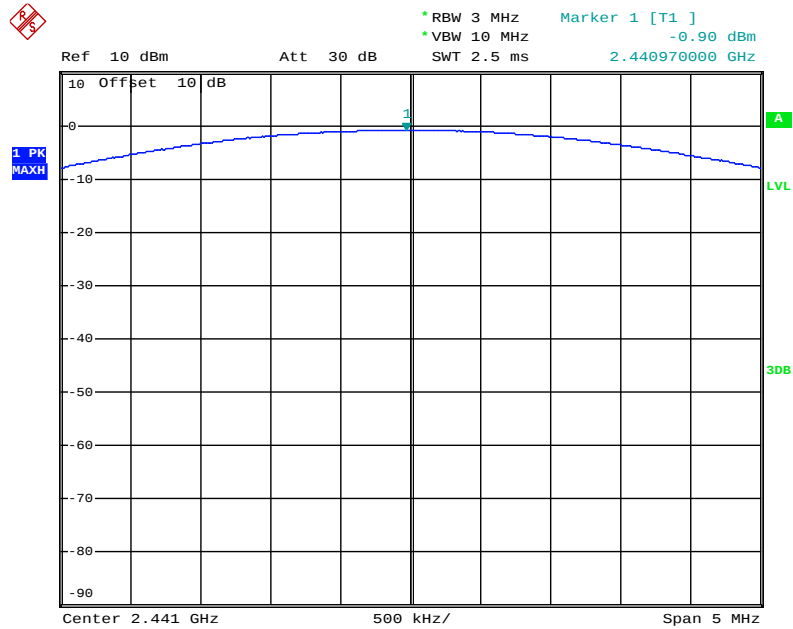
## GFSK Mode

### Low channel

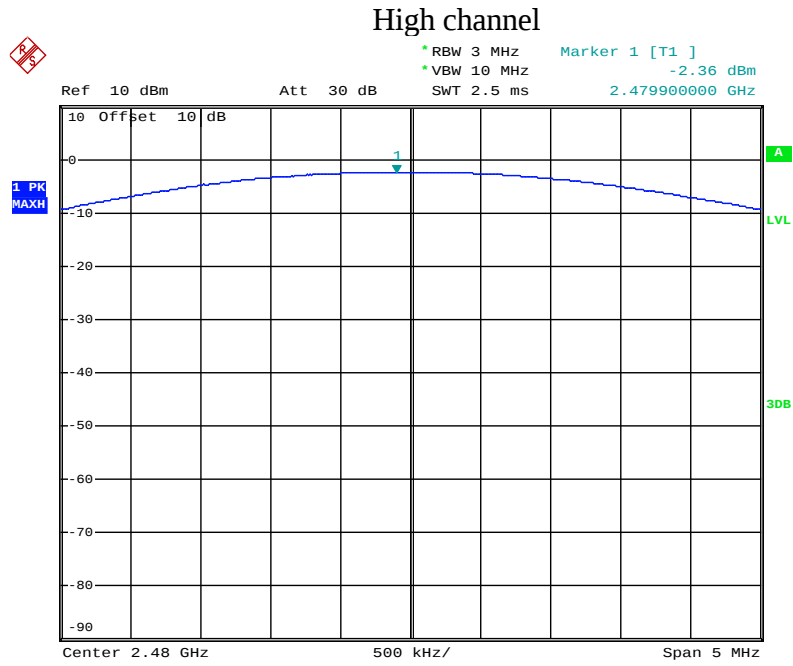


Date: 15.MAY.2019 16:16:12

### Middle channel

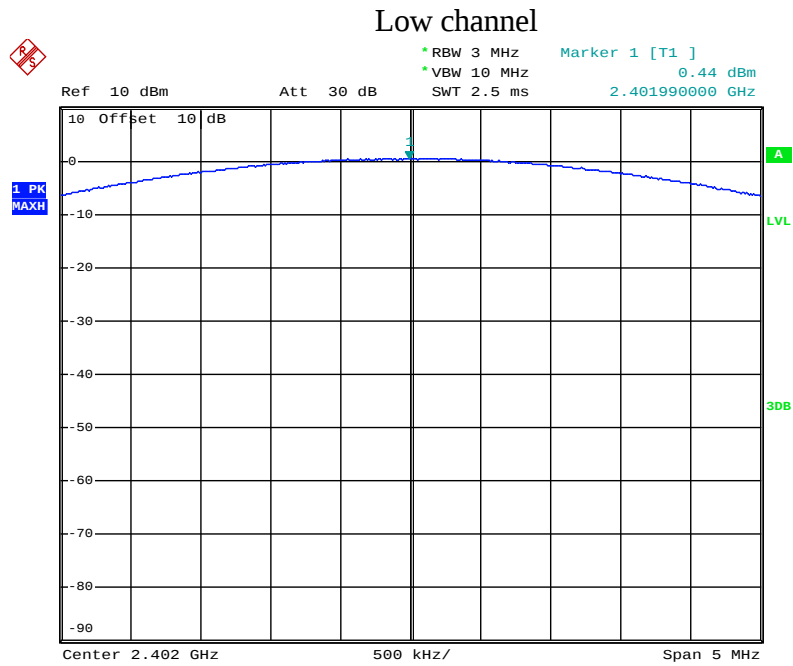


Date: 15.MAY.2019 16:17:12



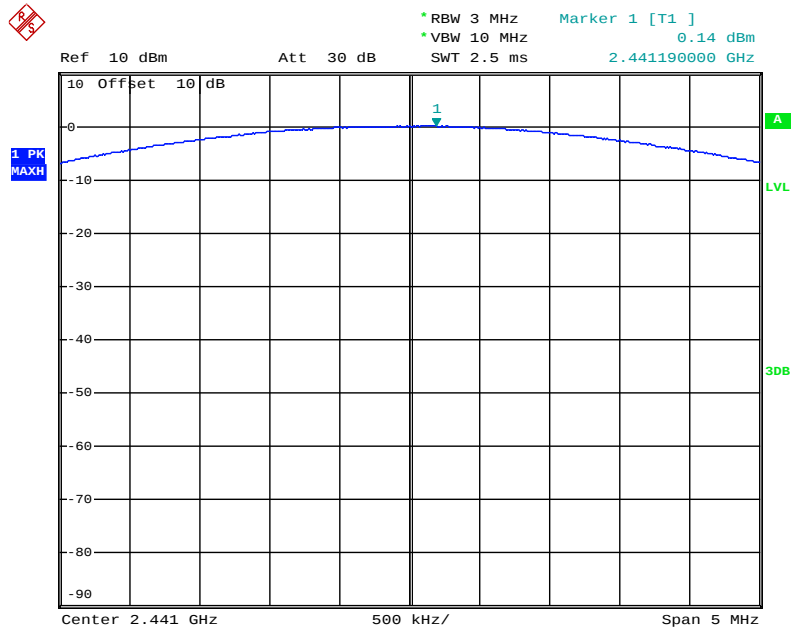
Date: 15.MAY.2019 16:17:45

## Π/4-DQPSK Mode



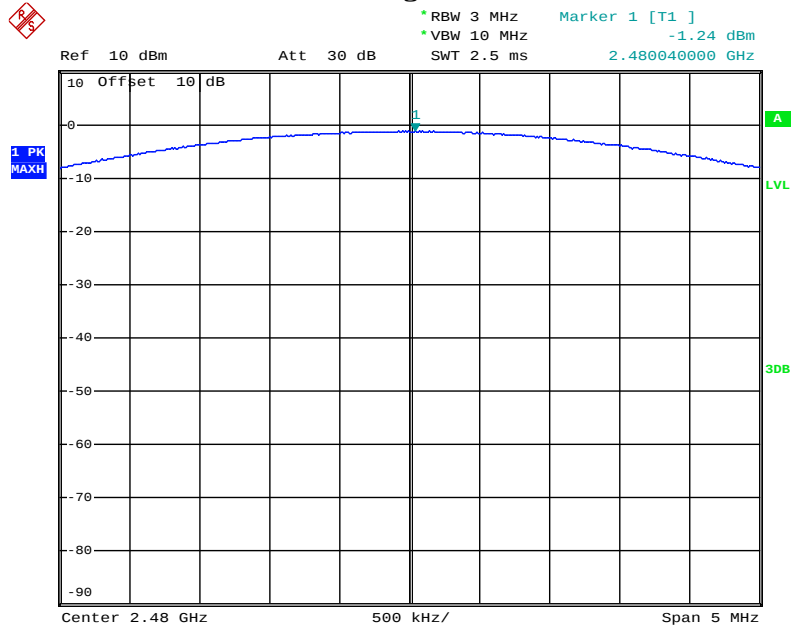
Date: 15.MAY.2019 16:24:52

### Middle channel



Date: 15.MAY.2019 16:24:26

### High channel

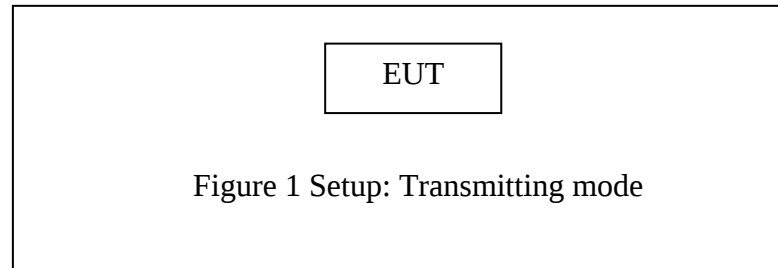


Date: 15.MAY.2019 16:23:50

## 11.RADIATED EMISSION TEST

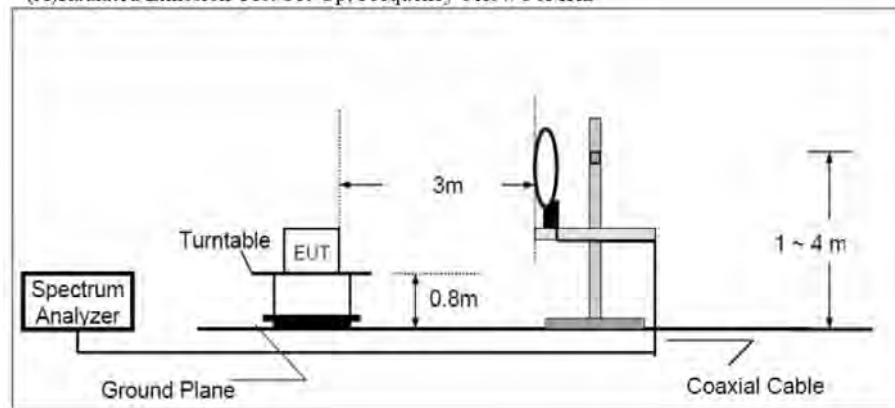
### 11.1.Block Diagram of Test Setup

#### 11.1.1.Block diagram of connection between the EUT and peripherals

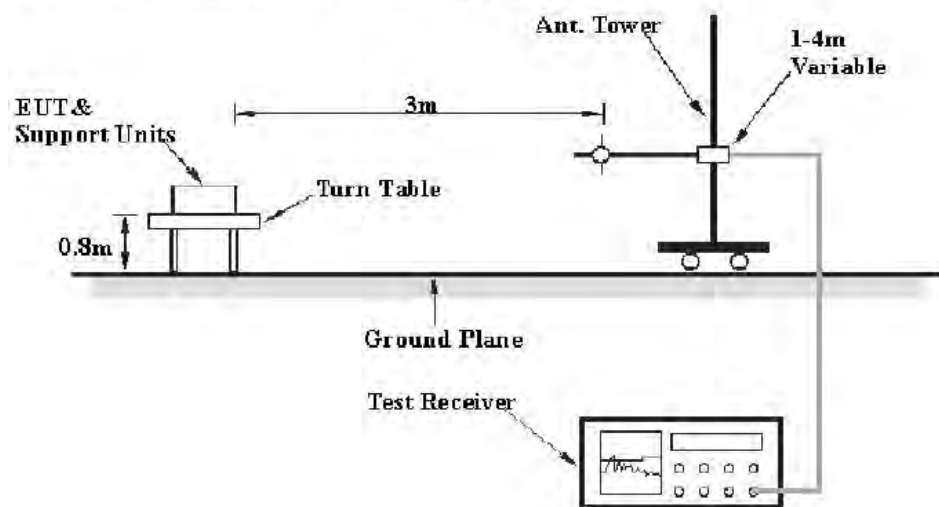


#### 11.1.2.Semi-Anechoic Chamber Test Setup Diagram

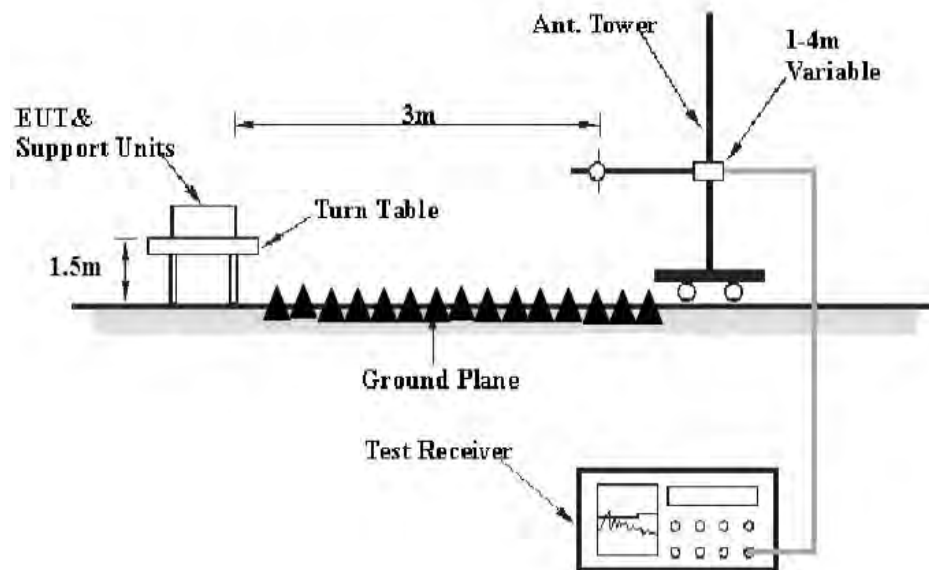
(A)Radiated Emission Test Set-Up, Frequency below 30MHz



(B)Radiated Emission Test Set-Up, Frequency 30MHz-1GHz



(C) Radiated Emission Test Set-Up, Frequency above 1GHz



## 11.2.The Limit For Section 15.247(d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

### 11.3.Restricted bands of operation

#### 11.3.1.FCC Part 15.205 Restricted bands of operation

(a) Except as shown in paragraph (d) of this section, Only spurious emissions are permitted in any of the frequency bands listed below:

| MHz                      | MHz                 | MHz           | GHz              |
|--------------------------|---------------------|---------------|------------------|
| 0.090-0.110              | 16.42-16.423        | 399.9-410     | 4.5-5.15         |
| <sup>1</sup> 0.495-0.505 | 16.69475-16.69525   | 608-614       | 5.35-5.46        |
| 2.1735-2.1905            | 16.80425-16.80475   | 960-1240      | 7.25-7.75        |
| 4.125-4.128              | 25.5-25.67          | 1300-1427     | 8.025-8.5        |
| 4.17725-4.17775          | 37.5-38.25          | 1435-1626.5   | 9.0-9.2          |
| 4.20725-4.20775          | 73-74.6             | 1645.5-1646.5 | 9.3-9.5          |
| 6.215-6.218              | 74.8-75.2           | 1660-1710     | 10.6-12.7        |
| 6.26775-6.26825          | 108-121.94          | 1718.8-1722.2 | 13.25-13.4       |
| 6.31175-6.31225          | 123-138             | 2200-2300     | 14.47-14.5       |
| 8.291-8.294              | 149.9-150.05        | 2310-2390     | 15.35-16.2       |
| 8.362-8.366              | 156.52475-156.52525 | 2483.5-2500   | 17.7-21.4        |
| 8.37625-8.38675          | 156.7-156.9         | 2690-2900     | 22.01-23.12      |
| 8.41425-8.41475          | 162.0125-167.17     | 3260-3267     | 23.6-24.0        |
| 12.29-12.293             | 167.72-173.2        | 3332-3339     | 31.2-31.8        |
| 12.51975-12.52025        | 240-285             | 3345.8-3358   | 36.43-36.5       |
| 12.57675-12.57725        | 322-335.4           | 3600-4400     | ( <sup>2</sup> ) |
| 13.36-13.41              |                     |               |                  |

<sup>1</sup>Until February 1, 1999, this restricted band shall be 0.490-0.510

<sup>2</sup>Above 38.6

(b) Except as provided in paragraphs (d) and (e), the field strength of emission appearing within these frequency bands shall not exceed the limits shown in Section 15.209. At frequencies equal to or less than 1000MHz, Compliance with the limits in Section 15.209 shall be demonstrated using measurement instrumentation employing a CISPR quasi-peak detector. Above 1000MHz, compliance with the emission limits in Section 15.209 shall be demonstrated based on the average value of the measured emissions. The provisions in Section 15.35 apply to these measurements.

### 11.4.Configuration of EUT on Measurement

The equipment is installed on Radiated Emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

## 11.5. Operating Condition of EUT

11.5.1. Setup the EUT and simulator as shown as Section 11.1.

11.5.2. Turn on the power of all equipment.

11.5.3. Let the EUT work in TX modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2441MHz, and 2480MHz TX frequency to transmit.

## 11.6. Test Procedure

The EUT and its simulators are placed on a turntable, which is 0.8 meter high above ground (Below 1GHz). The EUT and its simulators are placed on a turntable, which is 1.5 meter high above ground (Above 1GHz). The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement. This EUT was tested in 3 orthogonal positions and the Worst case position data was reported.

During the radiated emission test, the spectrum analyzer was set with the following configurations:

1. The resolution bandwidth and video bandwidth of test receiver/spectrum analyzer is 120kHz for Quasi-peak at frequency below 1GHz.
2. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz.
3. The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
4. All modes of operation were investigated and the worst-case emissions are reported.

### 11.7.Data Sample

| Frequency<br>(MHz) | Reading<br>(dB $\mu$ v) | Factor<br>(dB/m) | Result<br>(dB $\mu$ v/m) | Limit<br>(dB $\mu$ v/m) | Margin<br>(dB) | Remark |
|--------------------|-------------------------|------------------|--------------------------|-------------------------|----------------|--------|
| X.XX               | 28.66                   | -15.19           | 13.47                    | 40.0                    | -26.53         | QP     |

Frequency(MHz) = Emission frequency in MHz

Reading(dB $\mu$ v) = Uncorrected Analyzer/Receiver reading

Factor (dB/m) = Antenna factor + Cable Loss – Amplifier gain

Result(dB $\mu$ v/m) = Reading(dB $\mu$ v) + Factor(dB/m)

Limit (dB $\mu$ v/m) = Limit stated in standard

Margin (dB) = Result(dB $\mu$ v/m) - Limit (dB $\mu$ v/m)

QP = Quasi-peak Reading

Calculation Formula:

Margin(dB) = Result (dB $\mu$ V/m)–Limit(dB $\mu$ V/m)

Result(dB $\mu$ V/m)= Reading(dB $\mu$ V)+ Factor(dB/m)

The “Margin” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of -7dB means the emission is 7dB below the limit.

### 11.8.Test Result

**Pass.**

Test Lab: 3m Anechoic chamber

Test Engineer: Frank

Note: 1.We tested GFSK mode,  $\Pi/4$ -DQPSK Mode and recorded the Worse case data ( $\Pi/4$ -DQPSK mode) for all test mode.

2. Testing is carried out with frequency rang 9kHz to the tenth harmonics, which above 3th Harmonics are attenuated more than 20dB below the permissible limits or the field strength is too small to be measured.

The measurements greater than 20dB below the limit from 9kHz to 30MHz and 18 to 26.5GHz.

The spectrum analyzer plots are attached as below.

## Below 1GHz



### ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg.A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: FRANK2019 #984

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Eye Massager Smart Eye

Mode: TX2402MHz

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Polarization: Horizontal

Power Source: DC 3.7V

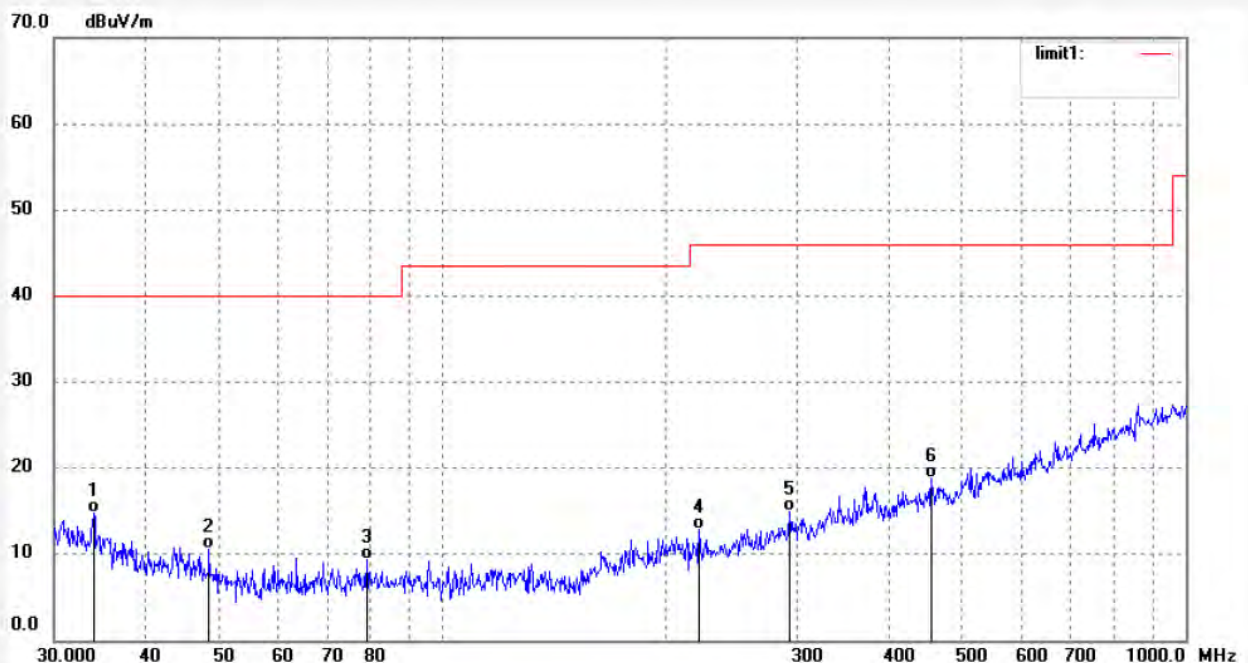
Date: 2019/05/08

Time: 16:38:27

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 33.9256     | 35.92            | -21.18      | 14.74           | 40.00          | -25.26      | QP       | 200         | 231           |        |
| 2   | 48.5482     | 36.29            | -25.68      | 10.61           | 40.00          | -29.39      | QP       | 200         | 41            |        |
| 3   | 79.1184     | 36.90            | -27.46      | 9.44            | 40.00          | -30.56      | QP       | 200         | 115           |        |
| 4   | 221.5010    | 36.78            | -23.99      | 12.79           | 46.00          | -33.21      | QP       | 200         | 92            |        |
| 5   | 293.3933    | 36.52            | -21.51      | 15.01           | 46.00          | -30.99      | QP       | 200         | 229           |        |
| 6   | 455.1888    | 36.00            | -17.11      | 18.89           | 46.00          | -27.11      | QP       | 200         | 103           |        |



## ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: FRANK2019 #985

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Eye Massager Smart Eye

Mode: TX2402MHz

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Polarization: Vertical

Power Source: DC 3.7V

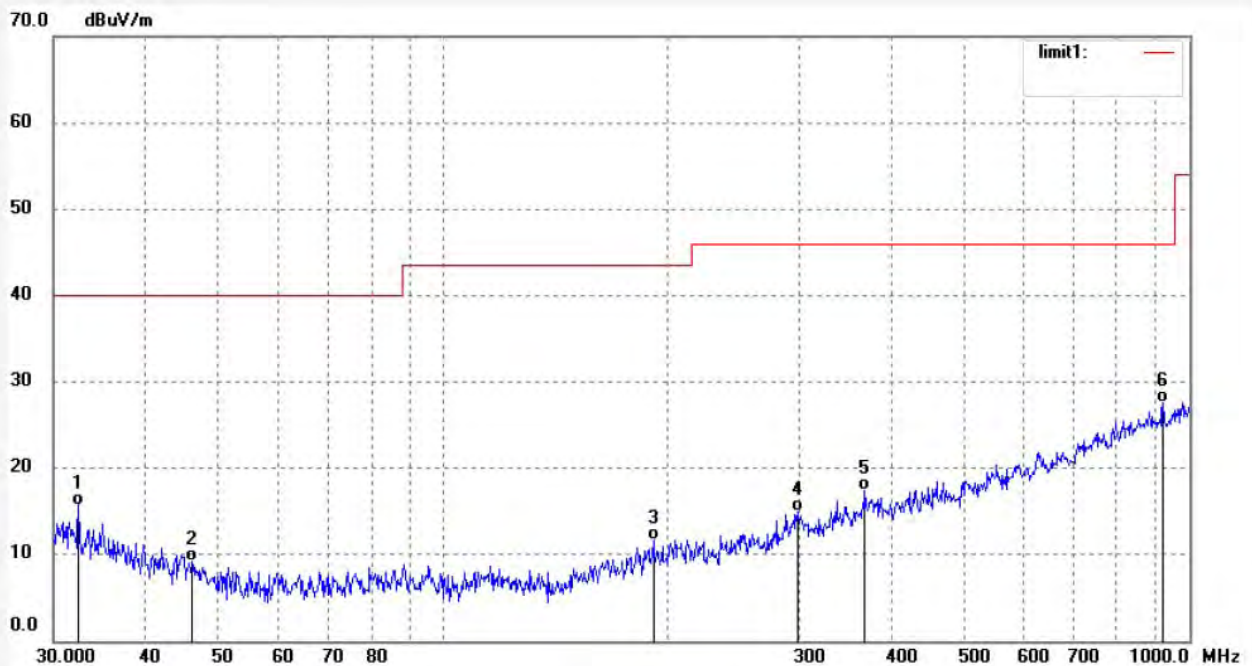
Date: 2019/05/08

Time: 16:39:03

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 32.4107     | 36.56            | -20.81      | 15.75           | 40.00          | -24.25      | QP       | 100         | 103           |        |
| 2   | 46.0557     | 33.97            | -24.80      | 9.17            | 40.00          | -30.83      | QP       | 100         | 219           |        |
| 3   | 191.1114    | 36.62            | -25.01      | 11.61           | 43.50          | -31.89      | QP       | 100         | 93            |        |
| 4   | 298.5932    | 36.16            | -21.28      | 14.88           | 46.00          | -31.12      | QP       | 100         | 244           |        |
| 5   | 367.3752    | 36.19            | -18.81      | 17.38           | 46.00          | -28.62      | QP       | 100         | 66            |        |
| 6   | 922.3667    | 34.41            | -6.81       | 27.60           | 46.00          | -18.40      | QP       | 100         | 216           |        |



## ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: FRANK2019 #987

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Eye Massager Smart Eye

Mode: TX2441MHz

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Polarization: Horizontal

Power Source: DC 3.7V

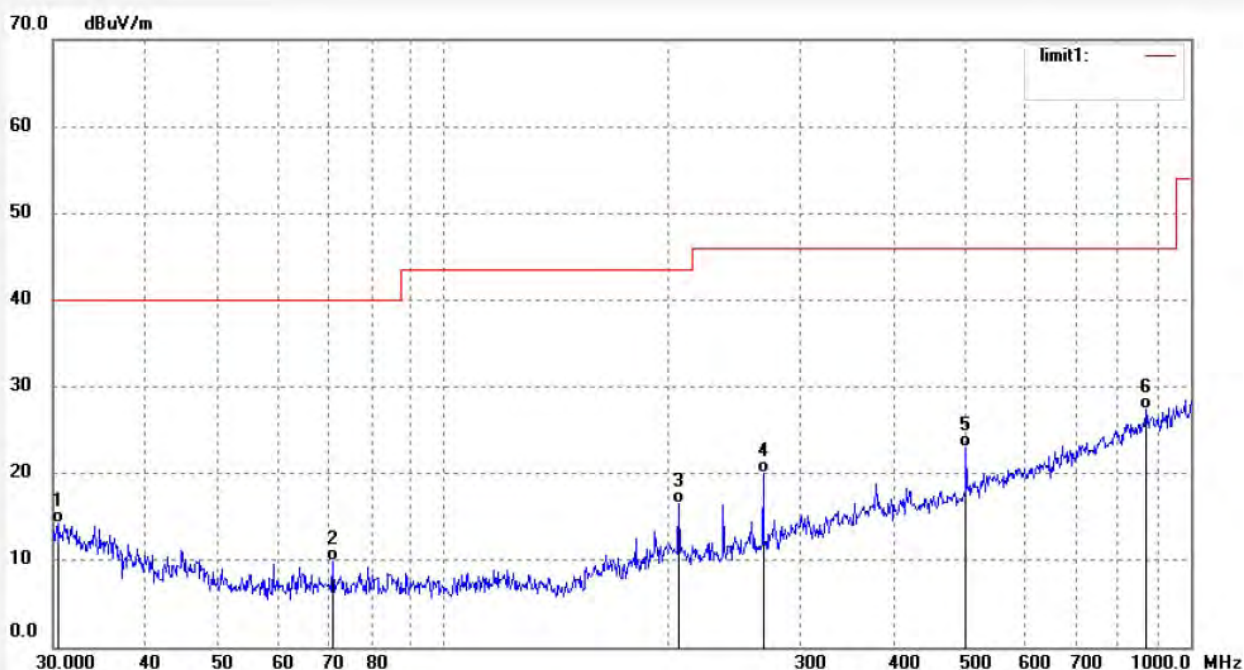
Date: 2019/05/08

Time: 16:40:07

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 30.4246     | 34.54            | -20.31      | 14.23           | 40.00          | -25.77      | QP       | 200         | 103           |        |
| 2   | 70.9535     | 37.32            | -27.52      | 9.80            | 40.00          | -30.20      | QP       | 200         | 221           |        |
| 3   | 206.4701    | 40.68            | -24.14      | 16.54           | 43.50          | -26.96      | QP       | 200         | 93            |        |
| 4   | 267.7787    | 42.64            | -22.64      | 20.00           | 46.00          | -26.00      | QP       | 200         | 218           |        |
| 5   | 500.4857    | 39.38            | -16.31      | 23.07           | 46.00          | -22.93      | QP       | 200         | 321           |        |
| 6   | 871.9442    | 34.98            | -7.67       | 27.31           | 46.00          | -18.69      | QP       | 200         | 201           |        |



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Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: FRANK2019 #986

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Eye Massager Smart Eye

Mode: TX2441MHz

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Polarization: Vertical

Power Source: DC 3.7V

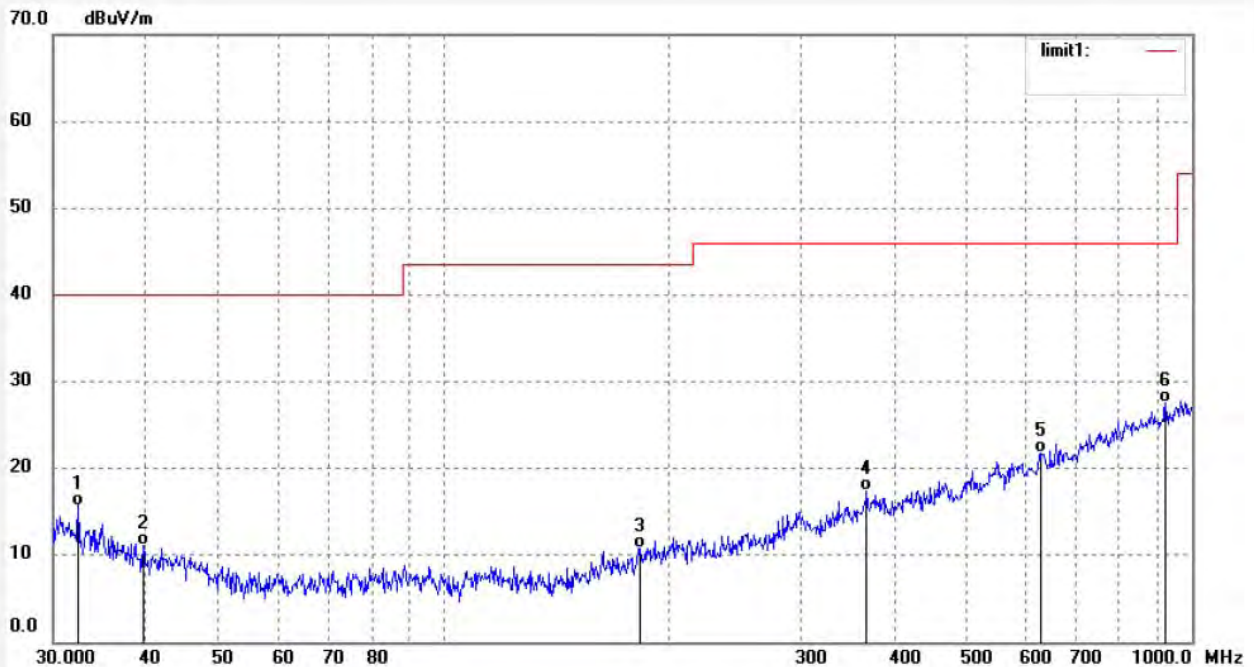
Date: 2019/05/08

Time: 16:39:13

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 32.4107     | 36.56            | -20.81      | 15.75           | 40.00          | -24.25      | QP       | 100         | 271           |        |
| 2   | 39.5977     | 34.52            | -23.42      | 11.10           | 40.00          | -28.90      | QP       | 100         | 66            |        |
| 3   | 181.9380    | 36.54            | -25.84      | 10.70           | 43.50          | -32.80      | QP       | 100         | 215           |        |
| 4   | 367.3752    | 36.19            | -18.81      | 17.38           | 46.00          | -28.62      | QP       | 100         | 93            |        |
| 5   | 626.6878    | 34.91            | -13.12      | 21.79           | 46.00          | -24.21      | QP       | 100         | 221           |        |
| 6   | 922.3667    | 34.41            | -6.81       | 27.60           | 46.00          | -18.40      | QP       | 100         | 103           |        |



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Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: FRANK2019 #988

Polarization: Horizontal

Standard: FCC Part 15C 3M Radiated

Power Source: DC 3.7V

Test item: Radiation Test

Date: 2019/05/08

Temp.( C)/Hum.(%) 25 C / 55 %

Time: 16:40:45

EUT: Eye Massager Smart Eye

Engineer Signature:

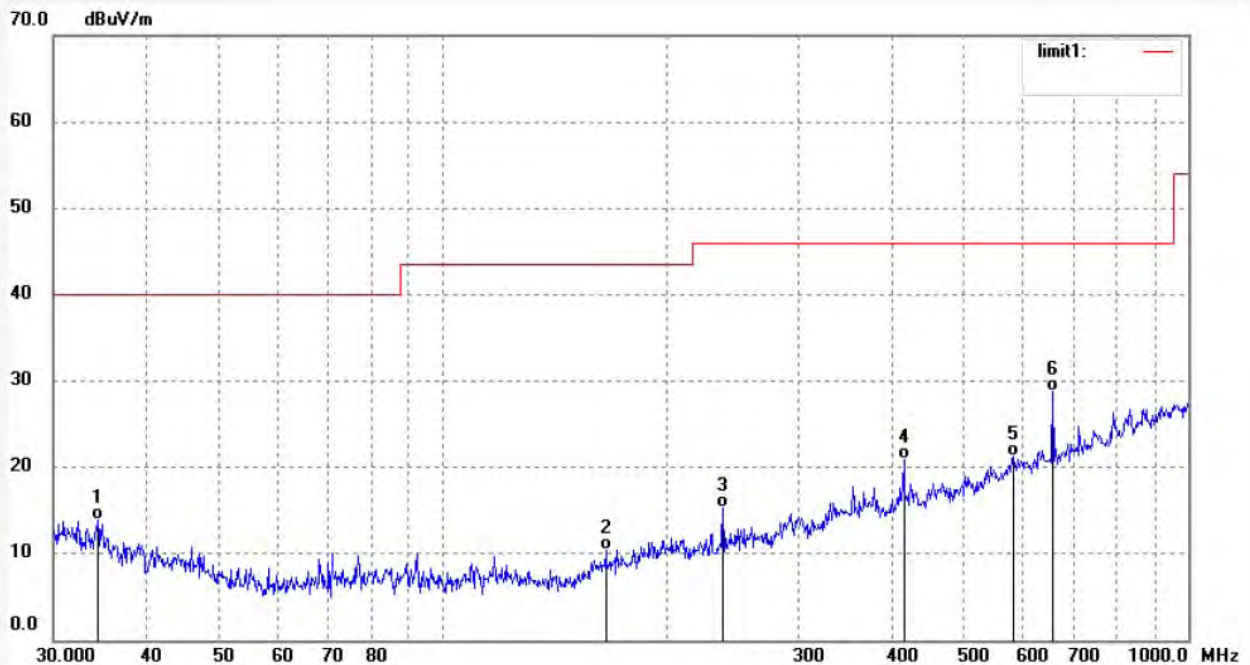
Mode: TX2480MHz

Distance: 3m

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 34.4059     | 35.20            | -21.30      | 13.90           | 40.00          | -26.10      | QP       | 200         | 103           |        |
| 2   | 165.4715    | 36.83            | -26.48      | 10.35           | 43.50          | -33.15      | QP       | 200         | 62            |        |
| 3   | 237.6262    | 38.99            | -23.76      | 15.23           | 46.00          | -30.77      | QP       | 200         | 112           |        |
| 4   | 415.4485    | 39.04            | -18.05      | 20.99           | 46.00          | -25.01      | QP       | 200         | 95            |        |
| 5   | 582.1122    | 35.33            | -14.08      | 21.25           | 46.00          | -24.75      | QP       | 200         | 226           |        |
| 6   | 658.2854    | 41.26            | -12.44      | 28.82           | 46.00          | -17.18      | QP       | 200         | 103           |        |



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Site: 1# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: FRANK2019 #989

Polarization: Vertical

Standard: FCC Part 15C 3M Radiated

Power Source: DC 3.7V

Test item: Radiation Test

Date: 2019/05/08

Temp.( C)/Hum.(%) 25 C / 55 %

Time: 16:41:45

EUT: Eye Massager Smart Eye

Engineer Signature:

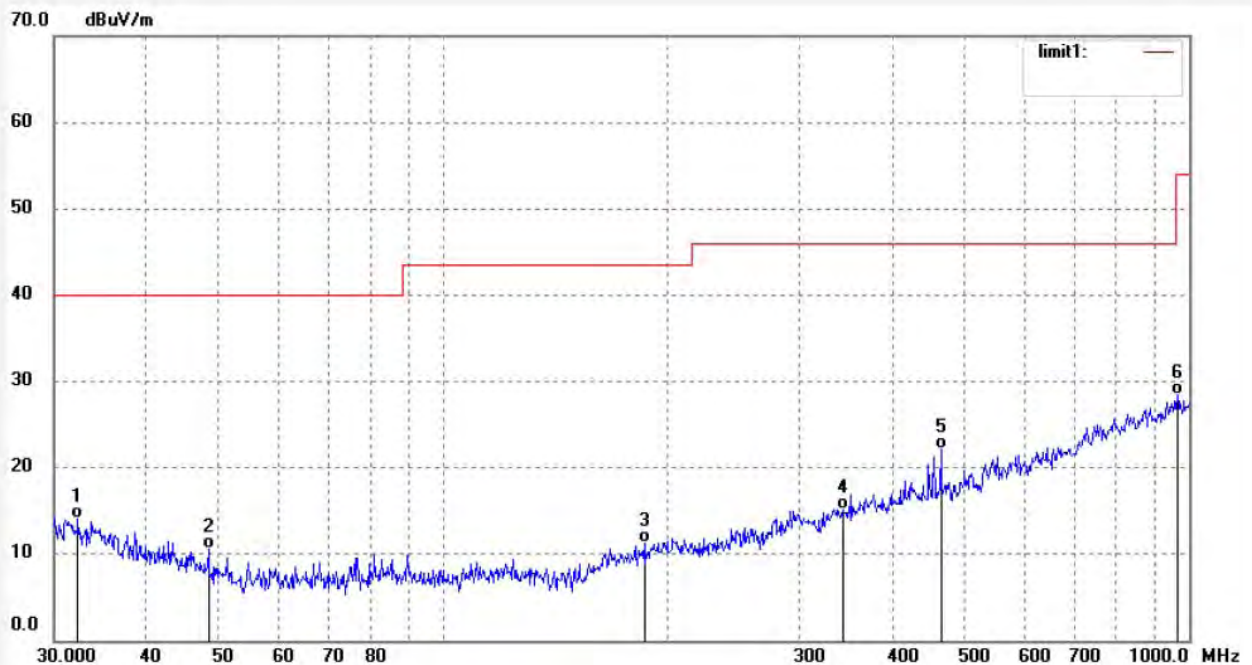
Mode: TX2480MHz

Distance: 3m

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 32.2972     | 34.89            | -20.78      | 14.11           | 40.00          | -25.89      | QP       | 100         | 103           |        |
| 2   | 48.3780     | 36.26            | -25.63      | 10.63           | 40.00          | -29.37      | QP       | 100         | 219           |        |
| 3   | 185.8143    | 36.84            | -25.48      | 11.36           | 43.50          | -32.14      | QP       | 100         | 92            |        |
| 4   | 343.6505    | 34.78            | -19.58      | 15.20           | 46.00          | -30.80      | QP       | 100         | 110           |        |
| 5   | 464.8867    | 39.00            | -16.83      | 22.17           | 46.00          | -23.83      | QP       | 100         | 302           |        |
| 6   | 965.4741    | 34.30            | -5.91       | 28.39           | 54.00          | -25.61      | QP       | 100         | 169           |        |

## Above 1GHz



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Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: FRANK2019 #990

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Eye Massager Smart Eye

Mode: TX2402MHz

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Polarization: Horizontal

Power Source: DC 3.7V

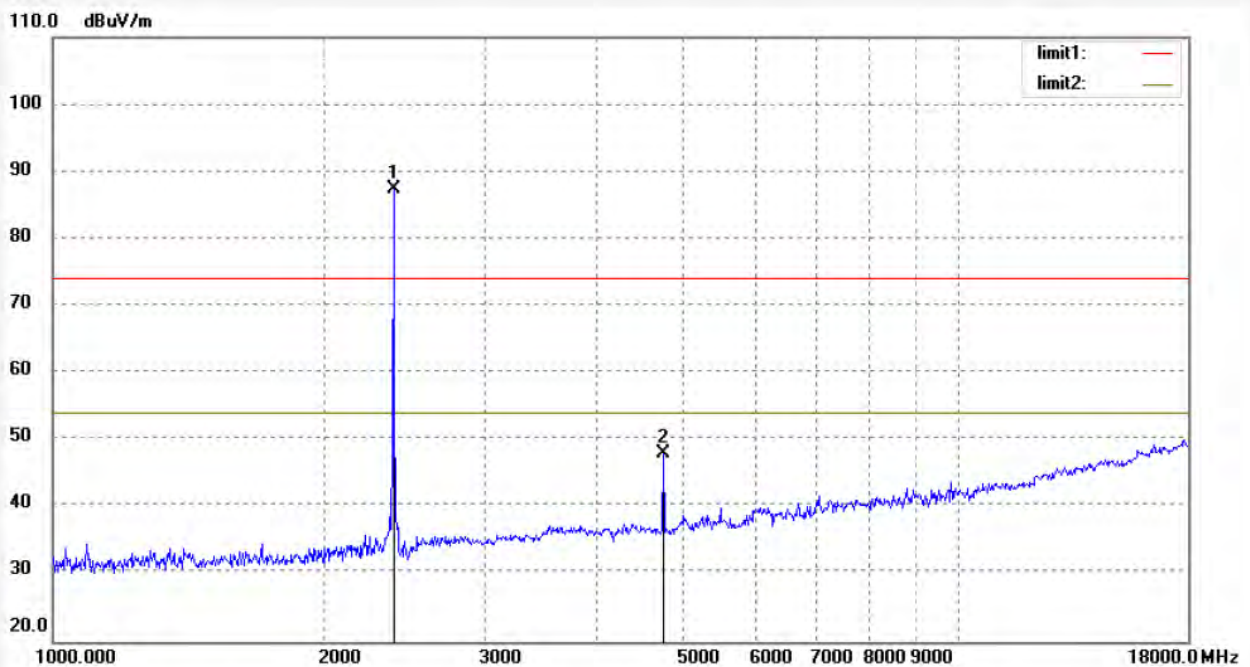
Date: 2019/05/08

Time: 16:48:38

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 2402.019    | 93.80            | -6.37       | 87.43           | /              | /           | peak     | 200         | 198           |        |
| 2   | 4804.057    | 47.35            | 0.70        | 48.05           | 74.00          | -25.95      | peak     | 200         | 103           |        |



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Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: FRANK2019 #991

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Eye Massager Smart Eye

Mode: TX2402MHz

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Polarization: Vertical

Power Source: DC 3.7V

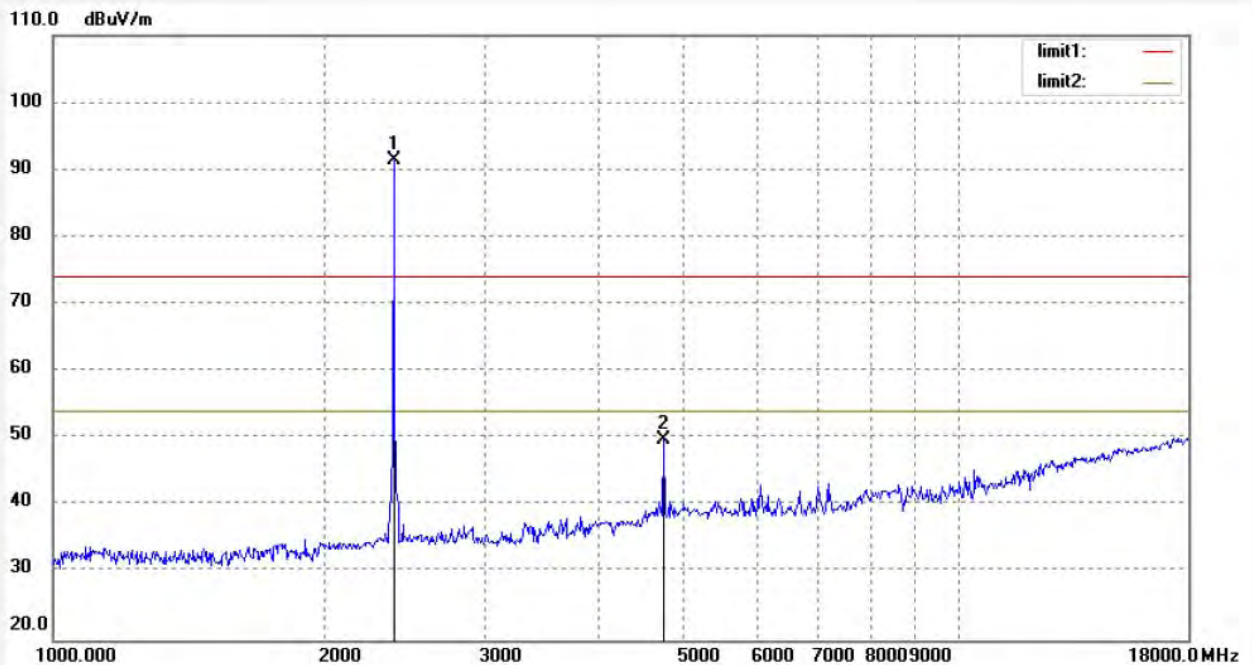
Date: 2019/05/08

Time: 16:50:17

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 2402.019    | 97.84            | -6.37       | 91.47           | /              | /           | peak     | 150         | 246           |        |
| 2   | 4804.057    | 49.11            | 0.70        | 49.81           | 74.00          | -24.19      | peak     | 150         | 198           |        |



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Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: FRANK2019 #993

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Eye Massager Smart Eye

Mode: TX2441MHz

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Polarization: Horizontal

Power Source: DC 3.7V

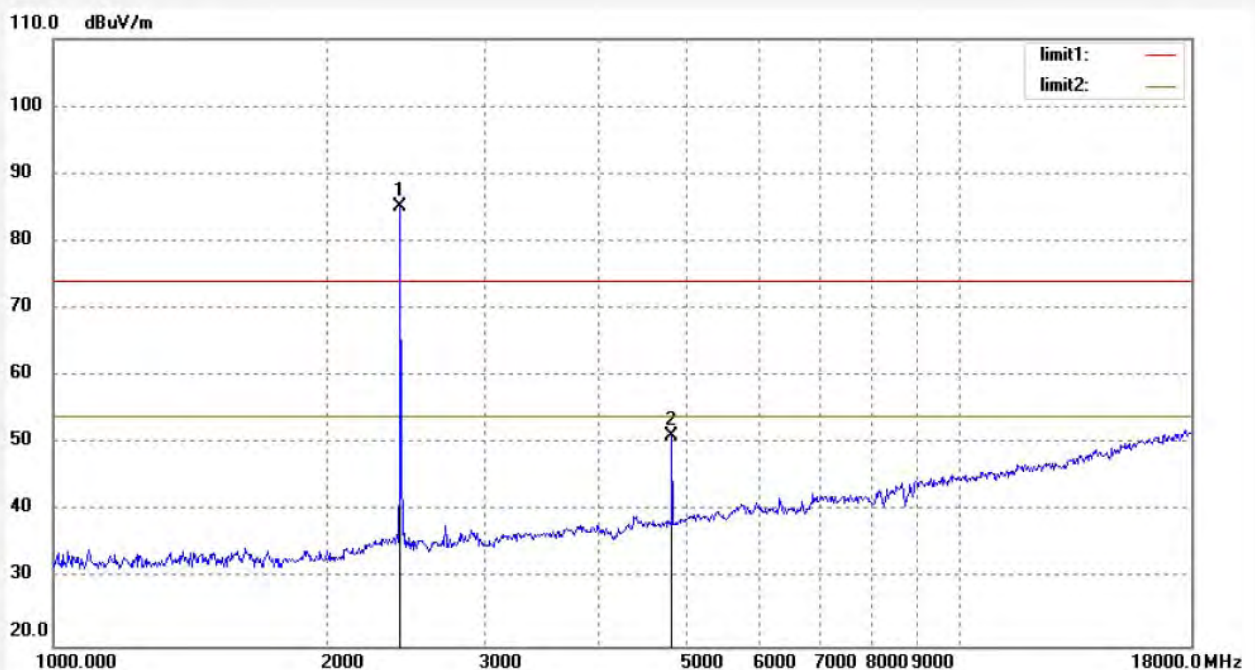
Date: 2019/05/08

Time: 16:56:49

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20190617





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Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: FRANK2019 #992

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Eye Massager Smart Eye

Mode: TX2441MHz

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Polarization: Vertical

Power Source: DC 3.7V

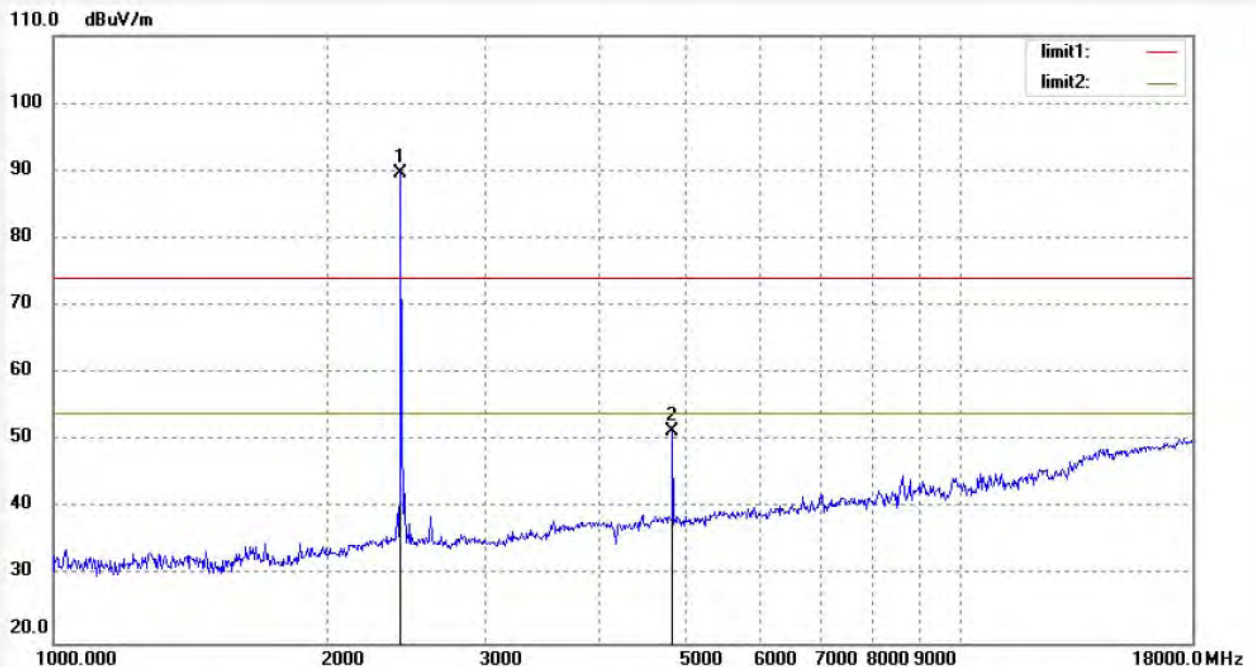
Date: 2019/05/08

Time: 16:51:52

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 2441.021    | 95.82            | -6.20       | 89.62           | /              | /           | peak     | 150         | 328           |        |
| 2   | 4882.324    | 50.41            | 1.07        | 51.48           | 74.00          | -22.52      | peak     | 150         | 109           |        |



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Site: 1# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: FRANK2019 #994

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Eye Massager Smart Eye

Mode: TX2480MHz

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Polarization: Horizontal

Power Source: DC 3.7V

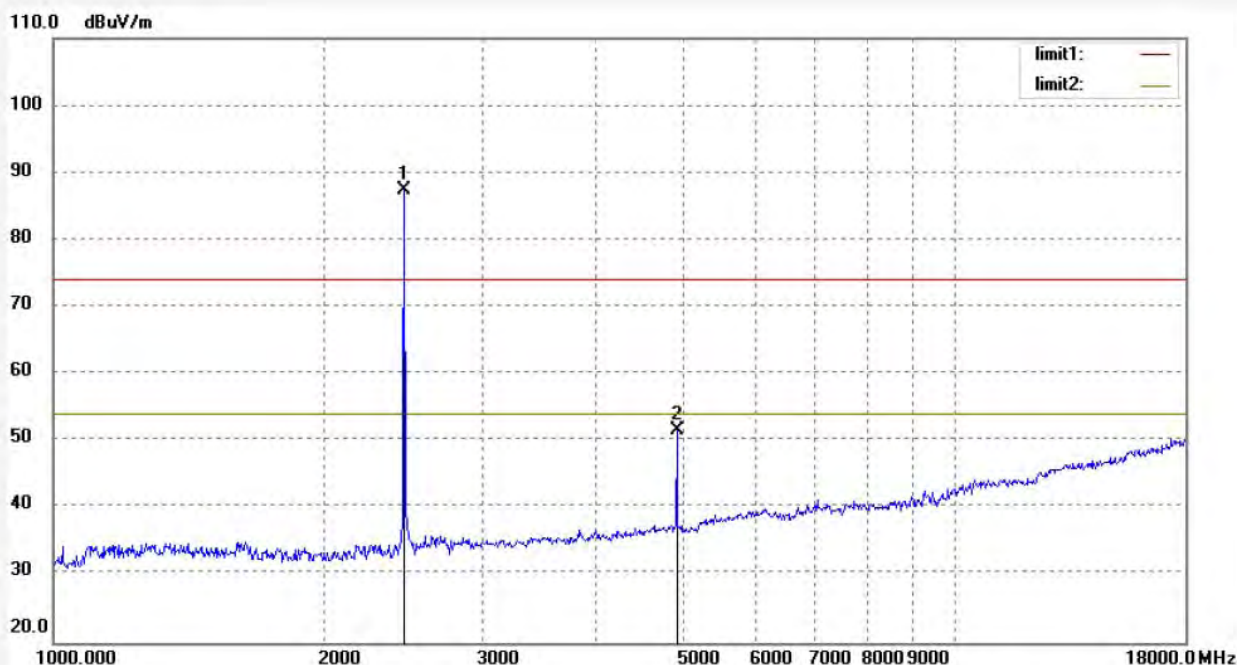
Date: 2019/05/08

Time: 16:58:09

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 2480.034    | 93.51            | -6.04       | 87.47           | /              | /           | peak     | 200         | 328           |        |
| 2   | 4960.044    | 50.17            | 1.50        | 51.67           | 74.00          | -22.33      | peak     | 200         | 196           |        |



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Site: 1# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: FRANK2019 #995

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Eye Massager Smart Eye

Mode: TX2480MHz

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Polarization: Vertical

Power Source: DC 3.7V

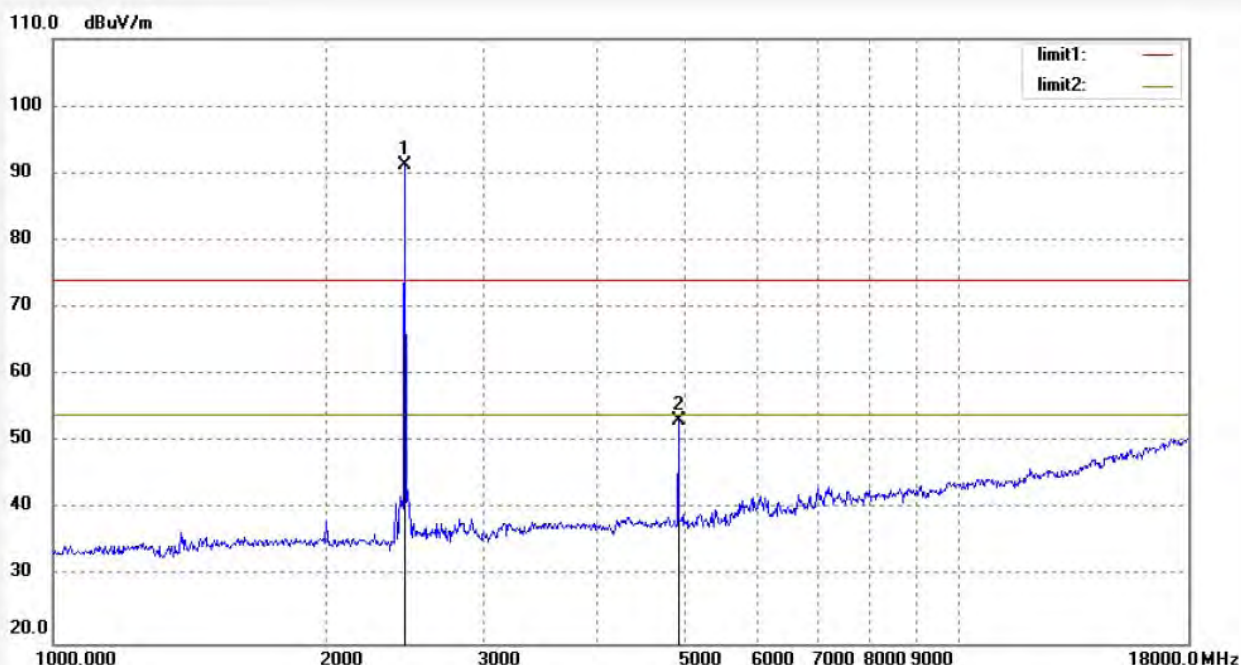
Date: 2019/05/08

Time: 16:59:56

Engineer Signature:

Distance: 3m

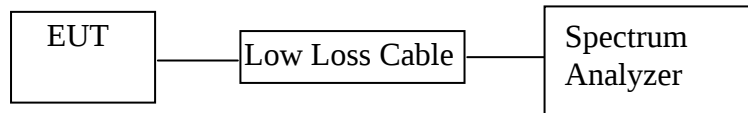
Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 2480.034    | 97.29            | -6.04       | 91.25           | /              | /           | peak     | 150         | 221           |        |
| 2   | 4960.044    | 51.70            | 1.50        | 53.20           | 74.00          | -20.80      | peak     | 150         | 103           |        |

## 12.BAND EDGE COMPLIANCE TEST

### 12.1.Block Diagram of Test Setup



### 12.2.The Requirement For Section 15.247(d)

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in Section 15.209(a).

### 12.3.EUT Configuration on Measurement

The equipment are installed on the emission Measurement to meet the commission requirements and operating regulations in a manner which tends to maximize its emission characteristics in normal application.

### 12.4.Operating Condition of EUT

12.4.1.Setup the EUT and simulator as shown as Section 12.1.

12.4.2.Turn on the power of all equipment.

12.4.3.Let the EUT work in TX (Hopping off, Hopping on) modes measure it. The transmit frequency are 2402-2480MHz. We select 2402MHz, 2480MHz TX frequency to transmit.

## 12.5. Test Procedure

12.5.1. The transmitter output was connected to the spectrum analyzer via a low loss cable.

12.5.2. Set RBW of spectrum analyzer to 100 kHz and VBW to 300 kHz with convenient frequency span including 100 kHz bandwidth from band edge.

12.5.3. The band edges was measured and recorded.

## 12.6. Test Result

Test Lab: Shielding room

Test Engineer: Frank

Note: Both hopping-on mode and hopping-off mode had been pre-tested, and only the Worse case was recorded in the test report.

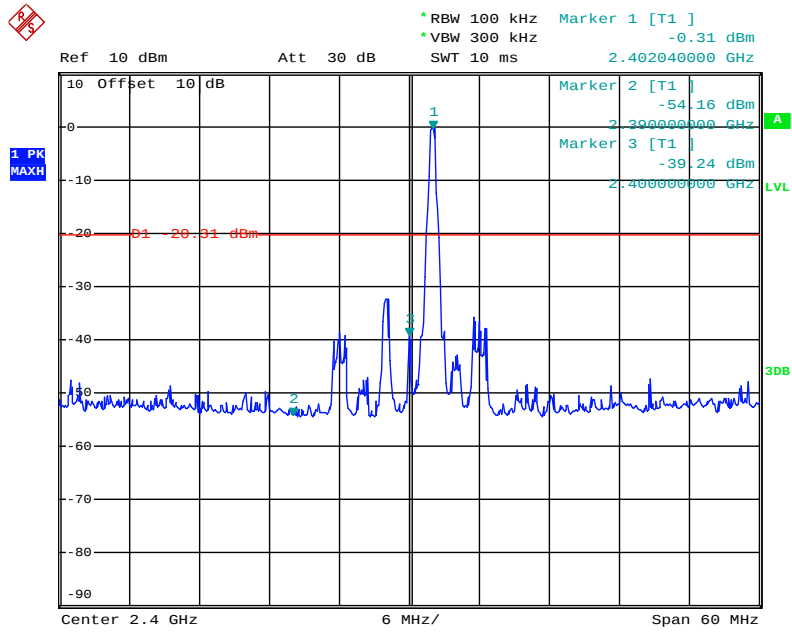
### Conducted Band Edge Result

#### Non-hopping mode

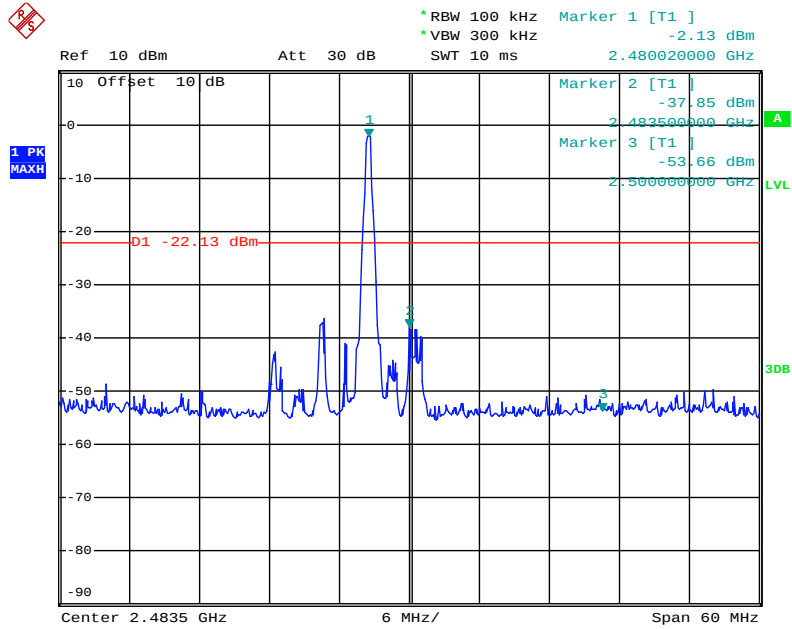
| Frequency (MHz) | Result of Band Edge (dBc) | Limit of Band Edge (dBc) | Result |
|-----------------|---------------------------|--------------------------|--------|
| GFSK Mode       |                           |                          |        |
| 2400.00         | 38.93                     | > 20dBc                  | Pass   |
| 2483.50         | 35.72                     | > 20dBc                  | Pass   |
| Π/4-DQPSK Mode  |                           |                          |        |
| 2400.00         | 39.22                     | > 20dBc                  | Pass   |
| 2483.50         | 35.79                     | > 20dBc                  | Pass   |

The spectrum analyzer plots are attached as below.

## GFSK Mode

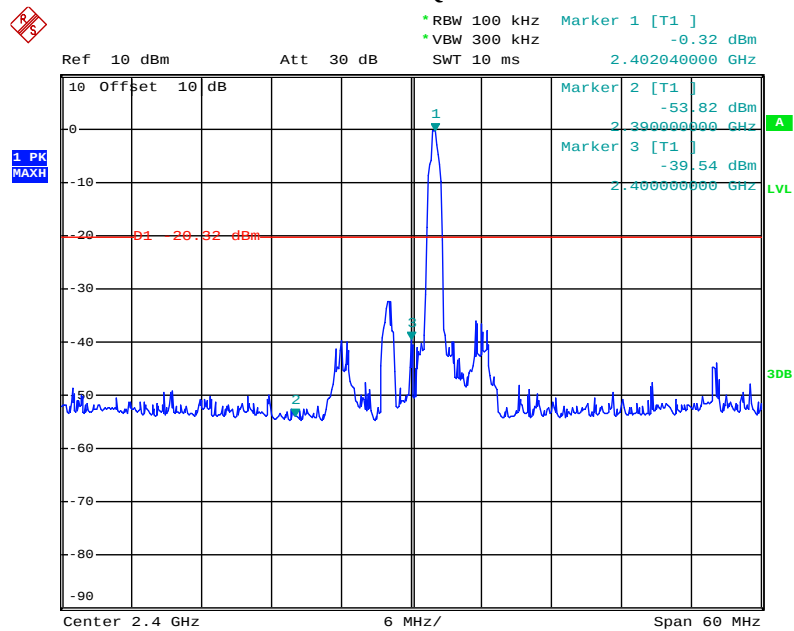


Date: 15.MAY.2019 16:21:32

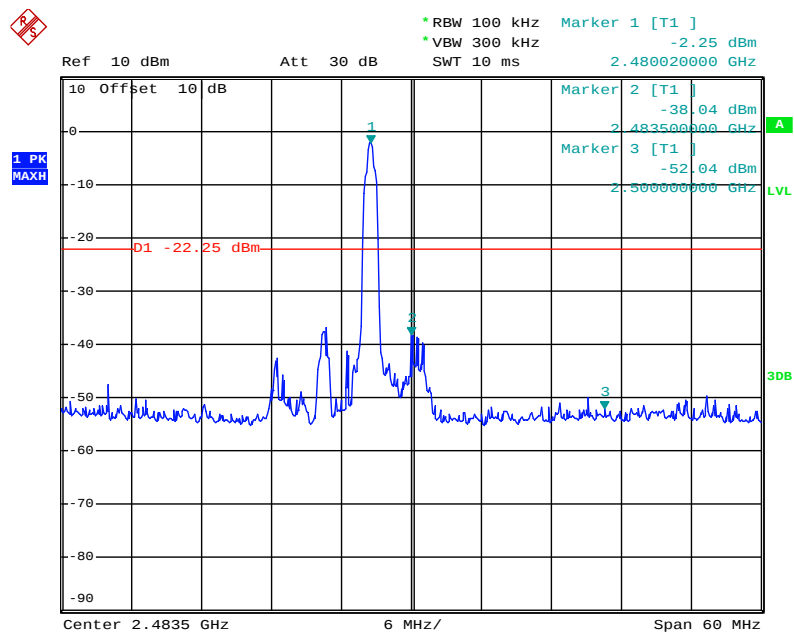


Date: 15.MAY.2019 16:20:17

## Π/4-DQPSK Mode



Date: 15.MAY.2019 16:22:27



Date: 15.MAY.2019 16:23:05

## Radiated Band Edge Result

Note:

1. Emissions attenuated more than 20 dB below the permissible value are not reported.
2. The field strength is calculated by adding the antenna factor, high pass filter loss(if used) and cable loss, and subtracting the amplifier gain(if any)from the measured reading. The basic equation calculation is as follows:

Result = Reading + Corrected Factor

3. Display the measurement of peak values.

Test Procedure:

The EUT and its simulators are placed on a turntable, which is 1.5 meter high above ground(Above 1GHz). The turntable can rotate 360 degrees to determine the position of the maximum emission level. EUT is set 3.0 meters away from the receiving antenna, which is mounted on an antenna tower. The antenna can be moved up and down between 1.0 meter and 4 meters to find out the maximum emission level. Broadband antenna (calibrated bi-log antenna) is used as receiving antenna. Both horizontal and vertical polarizations of the antenna are set on measurement. In order to find the maximum emission levels, all of the EUT location must be manipulated according to ANSI C63.10:2013 on radiated emission measurement. The EUT was tested in 3 orthogonal planes.

Let the EUT work in TX (Hopping off, Hopping on) modes measure it.  
We select 2402MHz, 2480MHz TX frequency to transmit(Hopping off mode).  
We select 2402-2480MHz TX frequency to transmit(Hopping on mode).

During the radiated emission test, the spectrum analyzer was set with the following configurations:

- 1.The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 3MHz for peak measurement with peak detector at frequency above 1GHz.
- 2.The resolution bandwidth of test receiver/spectrum analyzer is 1MHz and video bandwidth is 10Hz for Average measurement with peak detection at frequency above 1GHz.
- 3.All modes of operation were investigated and the Worse case (Π/4-DQPSK Mode) emissions are reported.

Test Lab: 3m Anechoic chamber

Test Engineer: Frank

The spectrum analyzer plots are attached as below.



**Non-hopping mode**  
**ACCURATE TECHNOLOGY CO., LTD.**  
 F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
 Science & Industry Park,Nanshan Shenzhen,P.R.China

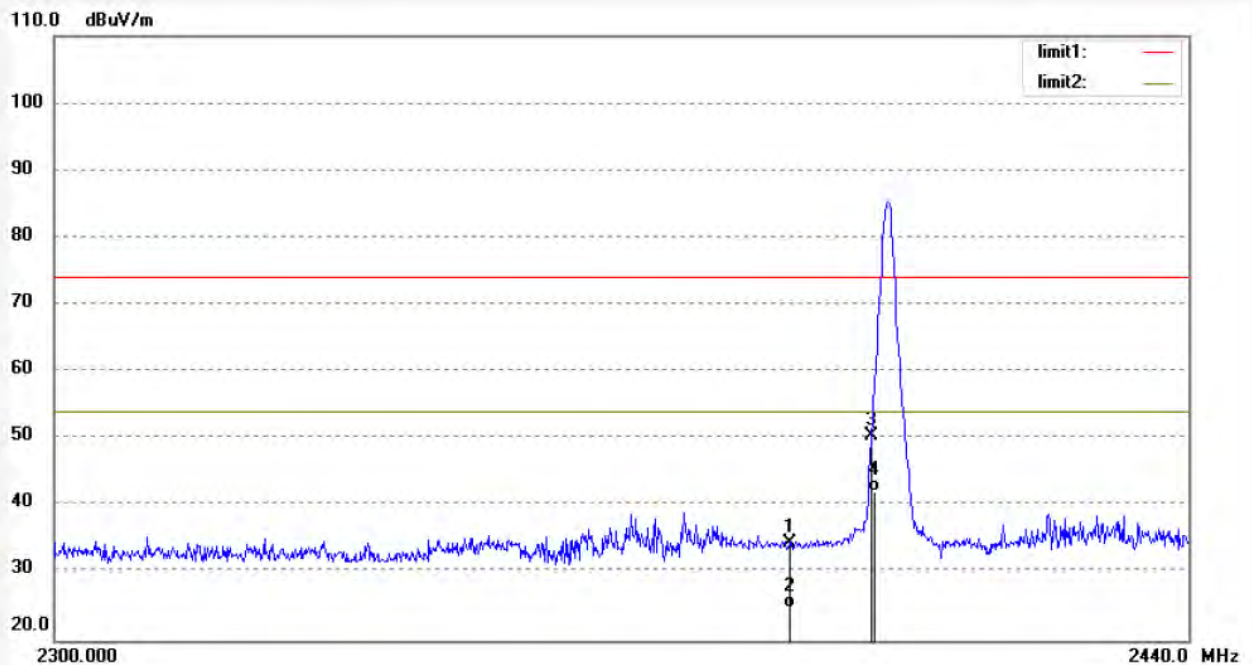
Site: 1# Chamber  
 Tel:+86-0755-26503290  
 Fax:+86-0755-26503396

Job No.: FRANK2019 #1002  
 Standard: FCC Part 15C 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 25 C / 55 %  
 EUT: Eye Massager Smart Eye  
 Mode: TX2402MHz  
 Model: OE-0909

Polarization: Horizontal  
 Power Source: DC 3.7V  
 Date: 2019/05/08  
 Time: 17:18:45  
 Engineer Signature:  
 Distance: 3m

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 2390.000    | 40.84            | -6.32       | 34.52           | 74.00          | -39.48      | peak     | 200         | 95            |        |
| 2   | 2390.000    | 31.15            | -6.32       | 24.83           | 54.00          | -29.17      | AVG      | 200         | 118           |        |
| 3   | 2400.000    | 56.80            | -6.27       | 50.53           | 74.00          | -23.47      | peak     | 200         | 295           |        |
| 4   | 2400.000    | 48.45            | -6.27       | 42.18           | 54.00          | -11.82      | AVG      | 200         | 103           |        |

Note: Average measurement with peak detection at No.2&4



## ACCURATE TECHNOLOGY CO., LTD.

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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: FRANK2019 #1003

Polarization: Vertical

Standard: FCC Part 15C 3M Radiated

Power Source: DC 3.7V

Test item: Radiation Test

Date: 2019/05/08

Temp.( C)/Hum.(%) 25 C / 55 %

Time: 17:19:48

EUT: Eye Massager Smart Eye

Engineer Signature:

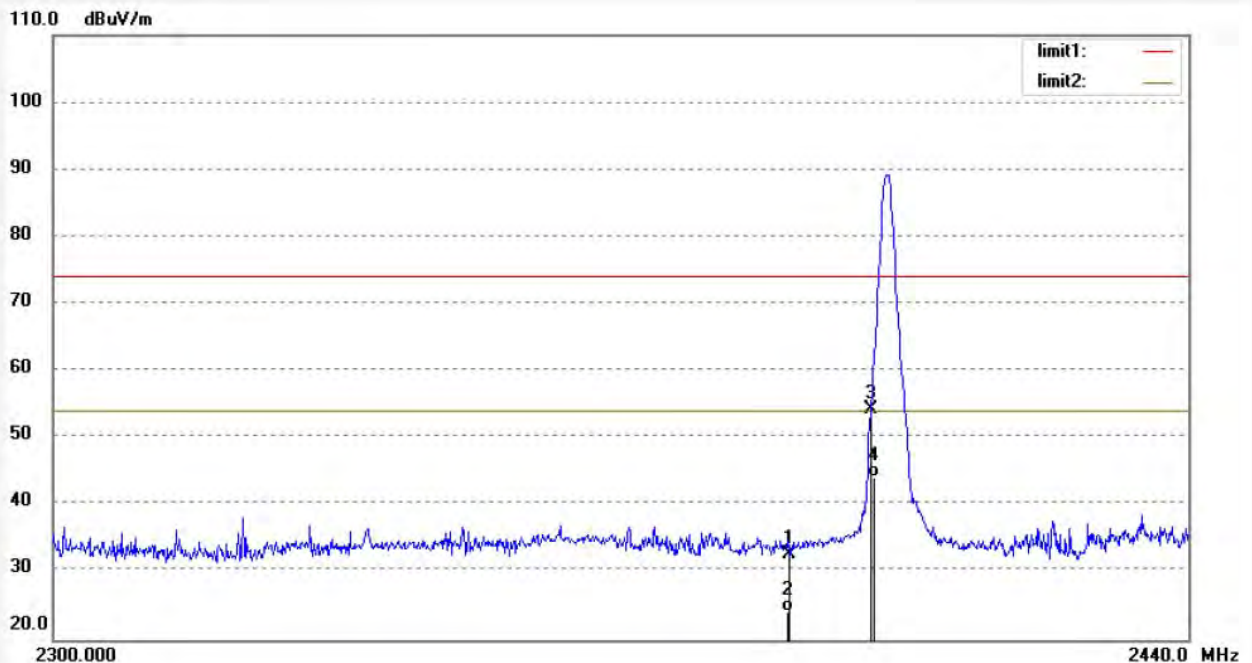
Mode: TX2402MHz

Distance: 3m

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 2390.000    | 39.09            | -6.32       | 32.77           | 74.00          | -41.23      | peak     | 150         | 311           |        |
| 2   | 2390.000    | 30.45            | -6.32       | 24.13           | 54.00          | -29.87      | AVG      | 150         | 214           |        |
| 3   | 2400.000    | 60.57            | -6.27       | 54.30           | 74.00          | -19.70      | peak     | 150         | 221           |        |
| 4   | 2400.000    | 50.45            | -6.27       | 44.18           | 54.00          | -9.82       | AVG      | 150         | 103           |        |

Note: Average measurement with peak detection at No.2&4



## ACCURATE TECHNOLOGY CO., LTD.

F1,Bldg,A,Changyuan New Material Port Keyuan Rd,  
Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: FRANK2019 #997

Polarization: Horizontal

Standard: FCC Part 15C 3M Radiated

Power Source: DC 3.7V

Test item: Radiation Test

Date: 2019/05/08

Temp.( C)/Hum.(%) 25 C / 55 %

Time: 17:06:40

EUT: Eye Massager Smart Eye

Engineer Signature:

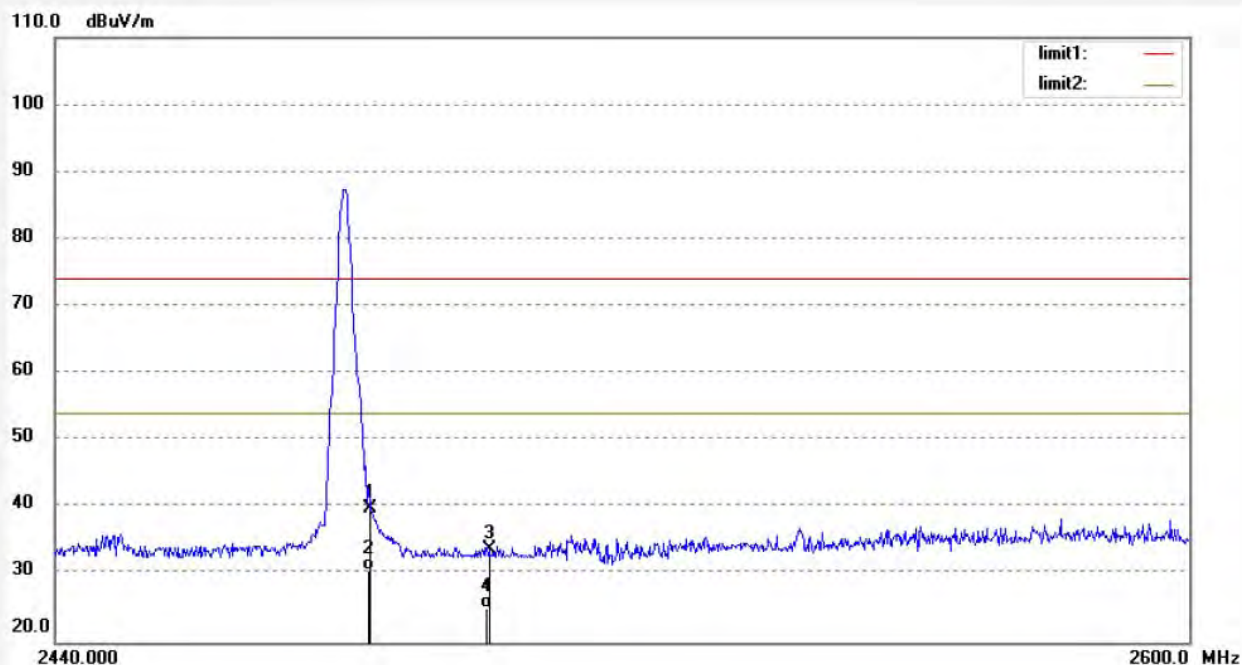
Mode: TX2480MHz

Distance: 3m

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 2483.500    | 45.83            | -5.89       | 39.94           | 74.00          | -34.06      | peak     | 200         | 194           |        |
| 2   | 2483.500    | 36.48            | -5.89       | 30.59           | 54.00          | -23.41      | AVG      | 200         | 201           |        |
| 3   | 2500.000    | 39.59            | -5.81       | 33.78           | 74.00          | -40.22      | peak     | 200         | 211           |        |
| 4   | 2500.000    | 30.78            | -5.81       | 24.97           | 54.00          | -29.03      | AVG      | 200         | 93            |        |

Note: Average measurement with peak detection at No.2&4



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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber

Tel:+86-0755-26503290

Fax:+86-0755-26503396

Job No.: FRANK2019 #996

Standard: FCC Part 15C 3M Radiated

Test item: Radiation Test

Temp.( C)/Hum.(%) 25 C / 55 %

EUT: Eye Massager Smart Eye

Mode: TX2480MHz

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Polarization: Vertical

Power Source: DC 3.7V

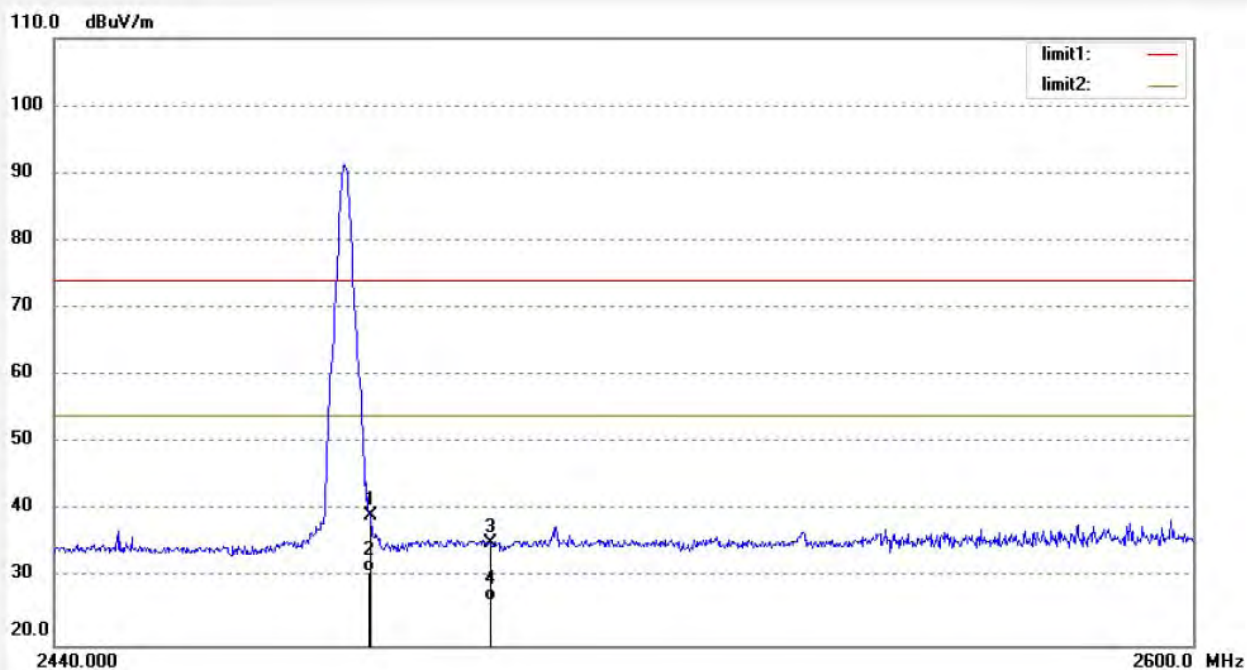
Date: 2019/05/08

Time: 17:05:42

Engineer Signature:

Distance: 3m

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 2483.500    | 45.13            | -5.89       | 39.24           | 74.00          | -34.76      | peak     | 150         | 141           |        |
| 2   | 2483.500    | 36.78            | -5.89       | 30.89           | 54.00          | -23.11      | AVG      | 150         | 92            |        |
| 3   | 2500.000    | 41.04            | -5.81       | 35.23           | 74.00          | -38.77      | peak     | 150         | 252           |        |
| 4   | 2500.000    | 32.48            | -5.81       | 26.67           | 54.00          | -27.33      | AVG      | 150         | 103           |        |

Note: Average measurement with peak detection at No.2&4



**Hopping mode**  
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 Science & Industry Park,Nanshan Shenzhen,P.R.China

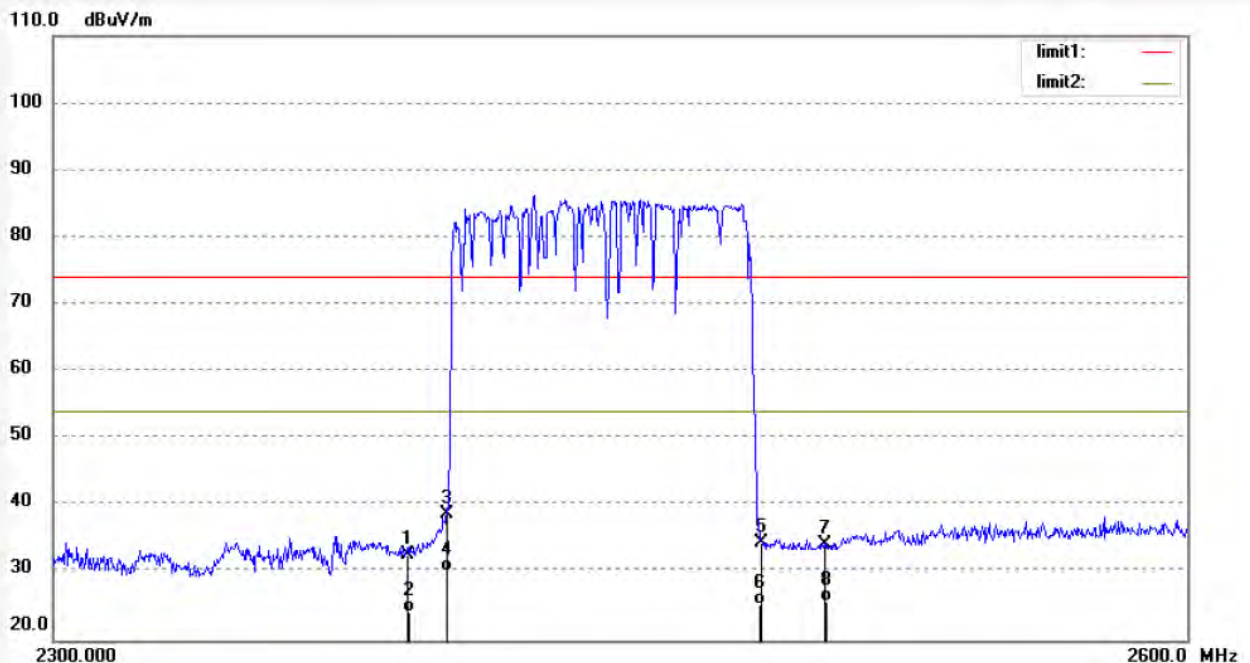
Site: 1# Chamber  
 Tel:+86-0755-26503290  
 Fax:+86-0755-26503396

Job No.: FRANK2019 #1005  
 Standard: FCC Part 15C 3M Radiated  
 Test item: Radiation Test  
 Temp.( C)/Hum.(%) 25 C / 55 %  
 EUT: Eye Massager Smart Eye  
 Mode: HOPPING  
 Model: OE-0909

Polarization: Horizontal  
 Power Source: DC 3.7V  
 Date: 2019/05/08  
 Time: 17:23:29  
 Engineer Signature:  
 Distance: 3m

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Note: Report NO.:ATE20190617



| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 2390.000    | 39.05            | -6.32       | 32.73           | 74.00          | -41.27      | peak     | 200         | 174           |        |
| 2   | 2390.000    | 30.45            | -6.32       | 24.13           | 54.00          | -29.87      | AVG      | 200         | 96            |        |
| 3   | 2400.000    | 45.16            | -6.27       | 38.89           | 74.00          | -35.11      | peak     | 200         | 111           |        |
| 4   | 2400.000    | 36.45            | -6.27       | 30.18           | 54.00          | -23.82      | AVG      | 200         | 224           |        |
| 5   | 2483.500    | 40.35            | -5.89       | 34.46           | 74.00          | -39.54      | peak     | 200         | 95            |        |
| 6   | 2483.500    | 31.12            | -5.89       | 25.23           | 54.00          | -28.77      | AVG      | 200         | 320           |        |
| 7   | 2500.000    | 40.18            | -5.81       | 34.37           | 74.00          | -39.63      | peak     | 200         | 115           |        |
| 8   | 2500.000    | 31.45            | -5.81       | 25.64           | 54.00          | -28.36      | AVG      | 200         | 162           |        |

Note: Average measurement with peak detection at No.2&4&6&8



## ACCURATE TECHNOLOGY CO., LTD.

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Science & Industry Park,Nanshan Shenzhen,P.R.China

Site: 1# Chamber  
Tel:+86-0755-26503290  
Fax:+86-0755-26503396

Job No.: FRANK2019 #1004

Polarization: Vertical

Standard: FCC Part 15C 3M Radiated

Power Source: DC 3.7V

Test item: Radiation Test

Date: 2019/05/08

Temp.( C)/Hum.(%) 25 C / 55 %

Time: 17:21:38

EUT: Eye Massager Smart Eye

Engineer Signature:

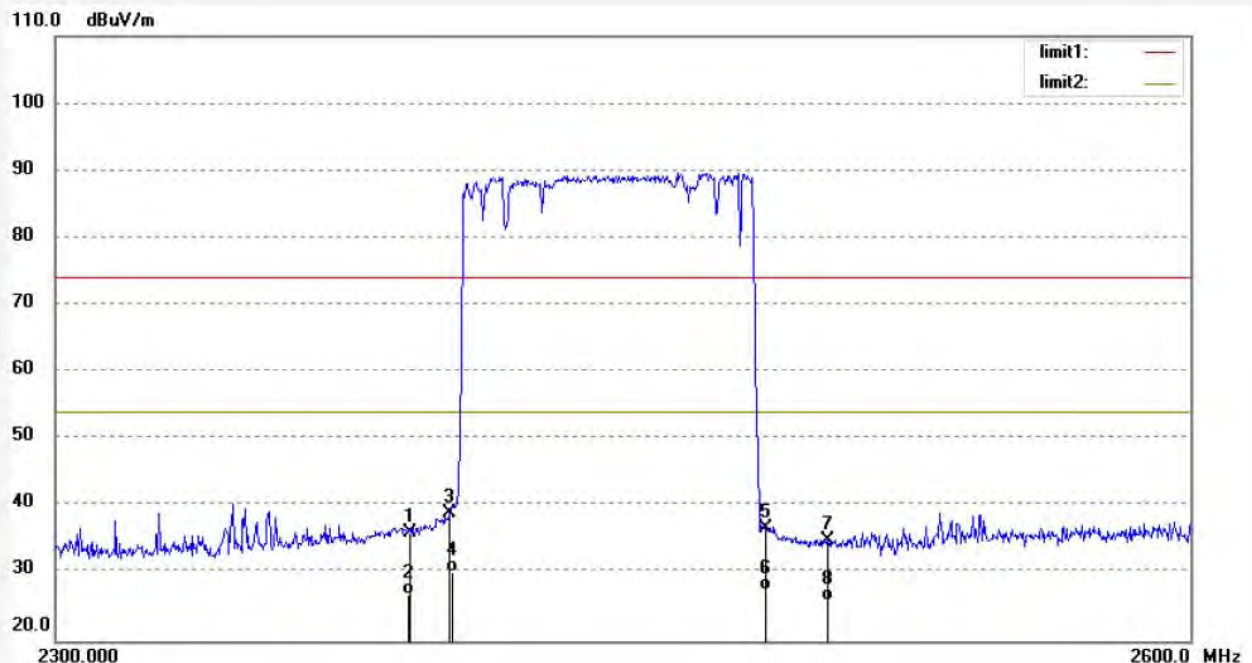
Mode: HOPPING

Distance: 3m

Model: OE-0909

Manufacturer: Shenzhen Fanr Technology Co.,Limited

Note: Report NO.:ATE20190617



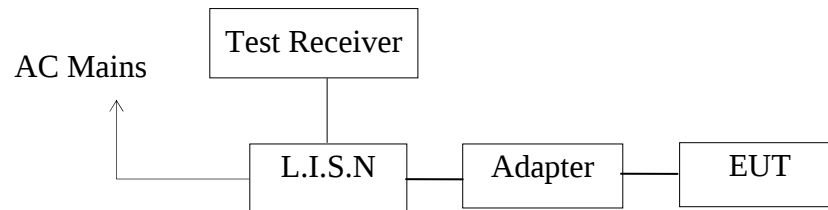
| No. | Freq. (MHz) | Reading (dBuV/m) | Factor (dB) | Result (dBuV/m) | Limit (dBuV/m) | Margin (dB) | Detector | Height (cm) | Degree (deg.) | Remark |
|-----|-------------|------------------|-------------|-----------------|----------------|-------------|----------|-------------|---------------|--------|
| 1   | 2390.000    | 42.49            | -6.32       | 36.17           | 74.00          | -37.83      | peak     | 150         | 97            |        |
| 2   | 2390.000    | 33.15            | -6.32       | 26.83           | 54.00          | -27.17      | AVG      | 150         | 159           |        |
| 3   | 2400.000    | 45.39            | -6.27       | 39.12           | 74.00          | -34.88      | peak     | 150         | 325           |        |
| 4   | 2400.000    | 36.48            | -6.27       | 30.21           | 54.00          | -23.79      | AVG      | 150         | 66            |        |
| 5   | 2483.500    | 42.67            | -5.89       | 36.78           | 74.00          | -37.22      | peak     | 150         | 115           |        |
| 6   | 2483.500    | 33.46            | -5.89       | 27.57           | 54.00          | -26.43      | AVG      | 150         | 93            |        |
| 7   | 2500.000    | 40.73            | -5.81       | 34.92           | 74.00          | -39.08      | peak     | 150         | 22            |        |
| 8   | 2500.000    | 31.78            | -5.81       | 25.97           | 54.00          | -28.03      | AVG      | 150         | 103           |        |

Note: Average measurement with peak detection at No.2&4&6&8

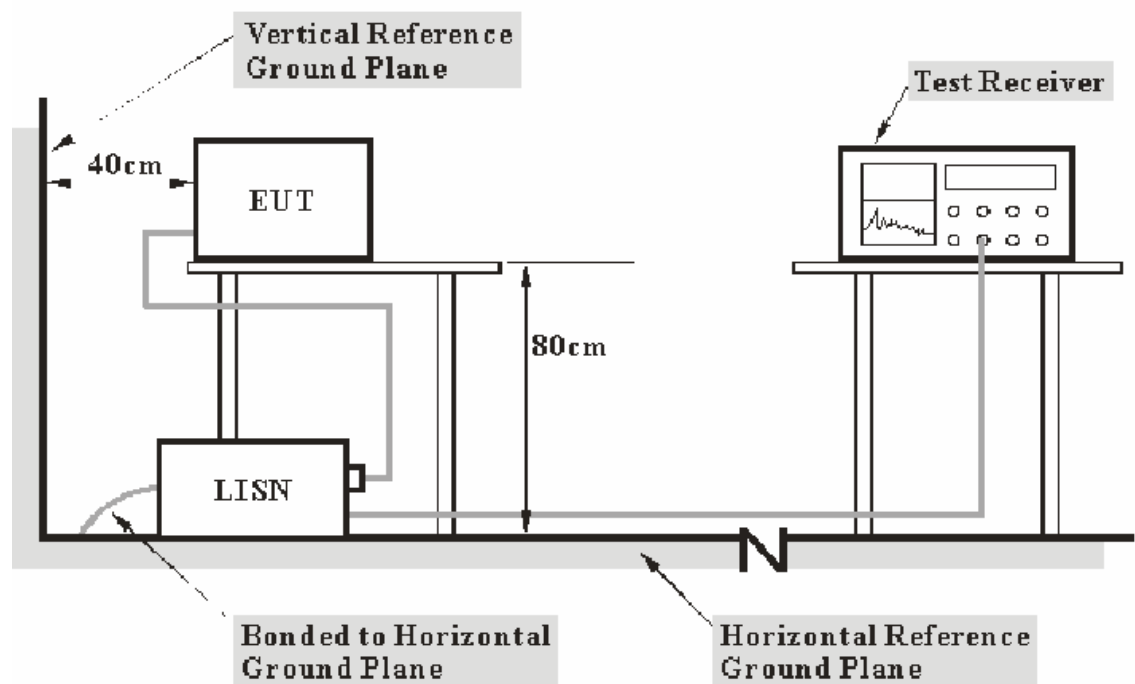
## 13.AC POWER LINE CONDUCTED EMISSION TEST

### 13.1.Block Diagram of Test Setup

#### 13.1.1.Block diagram of connection between the EUT and simulators



#### 13.1.2.Test System Setup



- Note:**
1. Support units were connected to second LISN.
  2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

### 13.2.Test Limits

| Frequency<br>(MHz)                                                                                       | Limit dB( $\mu$ V) |               |
|----------------------------------------------------------------------------------------------------------|--------------------|---------------|
|                                                                                                          | Quasi-peak Level   | Average Level |
| 0.15 - 0.50                                                                                              | 66.0 – 56.0 *      | 56.0 – 46.0 * |
| 0.50 - 5.00                                                                                              | 56.0               | 46.0          |
| 5.00 - 30.00                                                                                             | 60.0               | 50.0          |
| NOTE1: The lower limit shall apply at the transition frequencies.                                        |                    |               |
| NOTE2: The limit decreases linearly with the logarithm of the frequency in the range 0.15MHz to 0.50MHz. |                    |               |

### 13.3.Configuration of EUT on Measurement

The equipments are installed on Power Line Conducted Emission Measurement to meet the commission requirement and operating regulations in a manner, which tends to maximize its emission characteristics in a normal application.

### 13.4.Operating Condition of EUT

13.4.1.Setup the EUT and simulator as shown as Section 13.1.

13.4.2.Turn on the power of all equipment.

13.4.3.Let the EUT work in test mode and measure it.

### 13.5.Test Procedure

The EUT is put on the plane 0.8m high above the ground by insulating support and is connected to the power mains through a line impedance stabilization network (L.I.S.N.). This provides a 50ohm coupling impedance for the EUT system. Please refer the block diagram of the test setup and photographs. Both sides of AC lines are checked to find out the maximum conducted emission. In order to find the maximum emission levels, the relative positions of equipment and all of the interface cables shall be changed according to ANSI C63.10: 2013 on Conducted Emission Measurement. The bandwidth of test receiver (R & S ESCS30) is set at 9kHz.

The frequency range from 150kHz to 30MHz is checked.

### 13.6.Data Sample

| Frequency<br>(MHz) | Transducer<br>value<br>(dB) | QuasiPeak<br>Level<br>(dBμV) | Average<br>Level<br>(dBμV) | QuasiPeak<br>Limit<br>(dBμV) | Average<br>Limit<br>(dBμV) | QuasiPeak<br>Margin<br>(dB) | Average<br>Margin<br>(dB) | Remark<br>(Pass/Fail) |
|--------------------|-----------------------------|------------------------------|----------------------------|------------------------------|----------------------------|-----------------------------|---------------------------|-----------------------|
| X.XX               | 10.6                        | 25.3                         | 17.0                       | 59.0                         | 49.0                       | 33.4                        | 31.7                      | Pass                  |

Frequency(MHz) = Emission frequency in MHz

Transducer value(dB) = Insertion loss of LISN + Cable Loss

Level(dBμV) = Quasi-peak Reading/Average Reading + Transducer value

Limit (dBμV) = Limit stated in standard

Margin = Limit (dBμV) - Level (dBμV)

Calculation Formula:

Margin = Limit (dBμV) - Level (dBμV)

### 13.7.Test Result

**Pass.**

Test Lab: Shielding room

Test Engineer: Frank

The frequency range from 150kHz to 30MHz is checked.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.  
Emissions attenuated more than 20 dB below the permissible value are not reported.

All data was recorded in the Quasi-peak and average detection mode.

The spectral diagrams are attached as below.

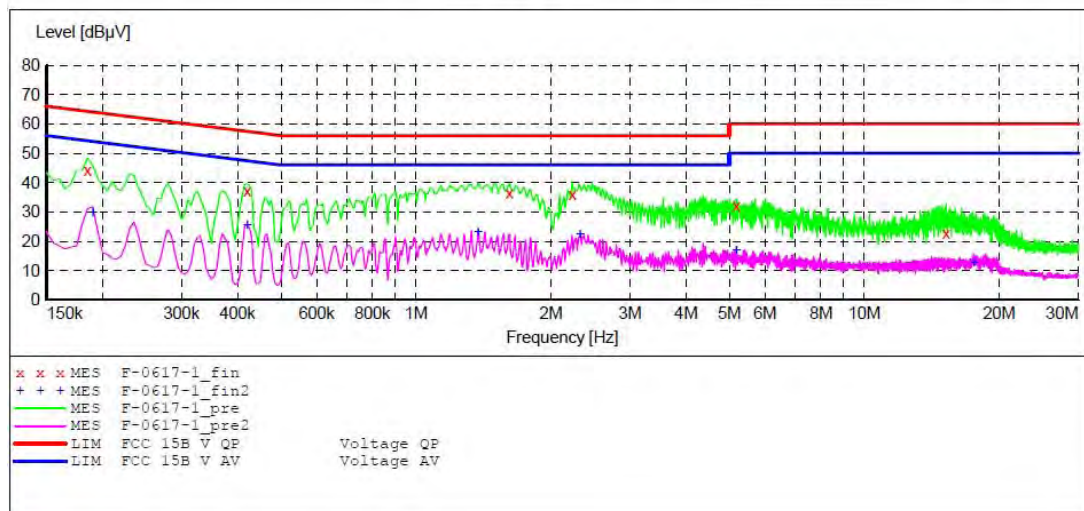
## ACCURATE TECHNOLOGY CO.,LTD

### CONDUCTED EMISSION STANDARD FCC PART 15 C

EUT: Eye Massager Smart Eye M/N:OE-0909  
 Manufacturer: Shenzhen Fanr Technology Co.,Limited  
 Operating Condition: BT Communication  
 Test Site: 1#Shielding Room  
 Operator: Frank  
 Test Specification: N 120V/60Hz  
 Comment: Report NO.:ATE20190617  
 Start of Test: 5/7/2019 / 10:20:27AM

### SCAN TABLE: "V 9K-30MHz fin"

Short Description: \_SUB\_STD\_VTERM2 1.70  
 Start Stop Step Detector Meas. IF Transducer  
 Frequency Frequency Width Time Bandw.  
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008  
 Average  
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average



### MEASUREMENT RESULT: "F-0617-1\_fin"

5/7/2019 10:25AM

| Frequency<br>MHz | Level<br>dBuV | Transd<br>dB | Limit<br>dBuV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.185000         | 44.30         | 10.5         | 64            | 20.0         | QP       | N    | GND |
| 0.420000         | 36.90         | 10.7         | 57            | 20.5         | QP       | N    | GND |
| 1.615000         | 36.50         | 10.9         | 56            | 19.5         | QP       | N    | GND |
| 2.230000         | 36.00         | 11.0         | 56            | 20.0         | QP       | N    | GND |
| 5.180000         | 32.10         | 11.2         | 60            | 27.9         | QP       | N    | GND |
| 15.220000        | 22.50         | 11.4         | 60            | 37.5         | QP       | N    | GND |

### MEASUREMENT RESULT: "F-0617-1\_fin2"

5/7/2019 10:25AM

| Frequency<br>MHz | Level<br>dBuV | Transd<br>dB | Limit<br>dBuV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.190000         | 29.70         | 10.5         | 54            | 24.3         | AV       | N    | GND |
| 0.420000         | 25.30         | 10.7         | 47            | 22.1         | AV       | N    | GND |
| 1.375000         | 23.10         | 10.9         | 46            | 22.9         | AV       | N    | GND |
| 2.320000         | 22.30         | 11.0         | 46            | 23.7         | AV       | N    | GND |
| 5.180000         | 17.00         | 11.2         | 50            | 33.0         | AV       | N    | GND |
| 17.575000        | 12.50         | 11.4         | 50            | 37.5         | AV       | N    | GND |

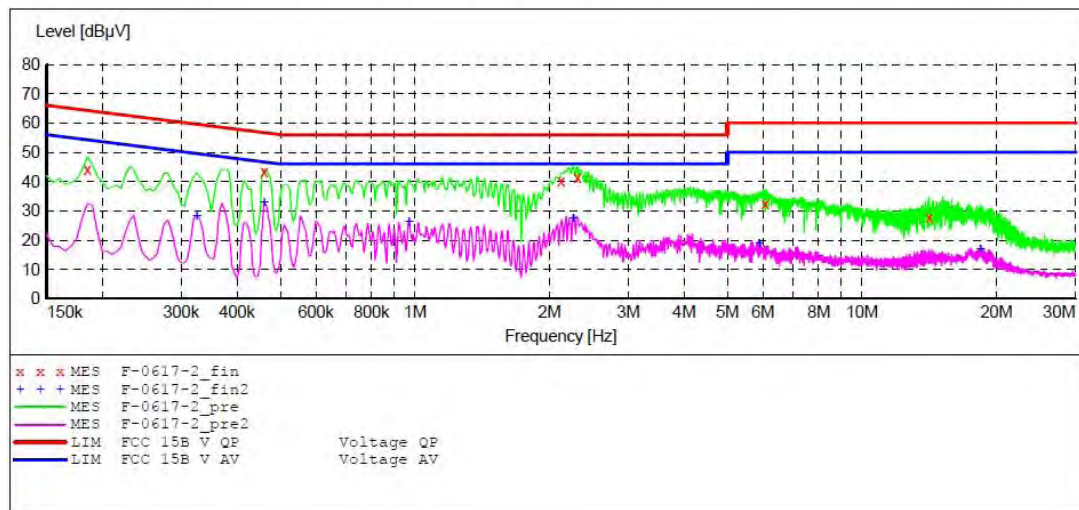
## ACCURATE TECHNOLOGY CO.,LTD

### CONDUCTED EMISSION STANDARD FCC PART 15 C

EUT: Eye Massager Smart Eye M/N:OE-0909  
 Manufacturer: Shenzhen Fanr Technology Co.,Limited  
 Operating Condition: BT Communication  
 Test Site: 1#Shielding Room  
 Operator: Frank  
 Test Specification: L 120V/60Hz  
 Comment: Report NO.:ATE20190617  
 Start of Test: 5/7/2019 / 10:26:03AM

### SCAN TABLE: "V 9K-30MHz fin"

Short Description: \_SUB\_STD\_VTERM2 1.70  
 Start Stop Step Detector Meas. IF Transducer  
 Frequency Frequency Width Time Bandw.  
 9.0 kHz 150.0 kHz 100.0 Hz QuasiPeak 1.0 s 200 Hz NSLK8126 2008  
 Average  
 150.0 kHz 30.0 MHz 5.0 kHz QuasiPeak 1.0 s 9 kHz NSLK8126 2008  
 Average



### MEASUREMENT RESULT: "F-0617-2\_fin"

5/7/2019 10:29AM

| Frequency<br>MHz | Level<br>dBuV | Transd<br>dB | Limit<br>dBuV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.185000         | 44.20         | 10.5         | 64            | 20.1         | QP       | L1   | GND |
| 0.460000         | 43.30         | 10.7         | 57            | 13.4         | QP       | L1   | GND |
| 2.120000         | 40.40         | 11.0         | 56            | 15.6         | QP       | L1   | GND |
| 2.310000         | 41.60         | 11.0         | 56            | 14.4         | QP       | L1   | GND |
| 6.070000         | 32.30         | 11.2         | 60            | 27.7         | QP       | L1   | GND |
| 14.155000        | 27.90         | 11.4         | 60            | 32.1         | QP       | L1   | GND |

### MEASUREMENT RESULT: "F-0617-2\_fin2"

5/7/2019 10:29AM

| Frequency<br>MHz | Level<br>dBuV | Transd<br>dB | Limit<br>dBuV | Margin<br>dB | Detector | Line | PE  |
|------------------|---------------|--------------|---------------|--------------|----------|------|-----|
| 0.325000         | 28.20         | 10.6         | 50            | 21.4         | AV       | L1   | GND |
| 0.460000         | 32.70         | 10.7         | 47            | 14.0         | AV       | L1   | GND |
| 0.970000         | 26.20         | 10.8         | 46            | 19.8         | AV       | L1   | GND |
| 2.260000         | 27.30         | 11.0         | 46            | 18.7         | AV       | L1   | GND |
| 5.880000         | 19.00         | 11.2         | 50            | 31.0         | AV       | L1   | GND |
| 18.415000        | 16.70         | 11.4         | 50            | 33.3         | AV       | L1   | GND |

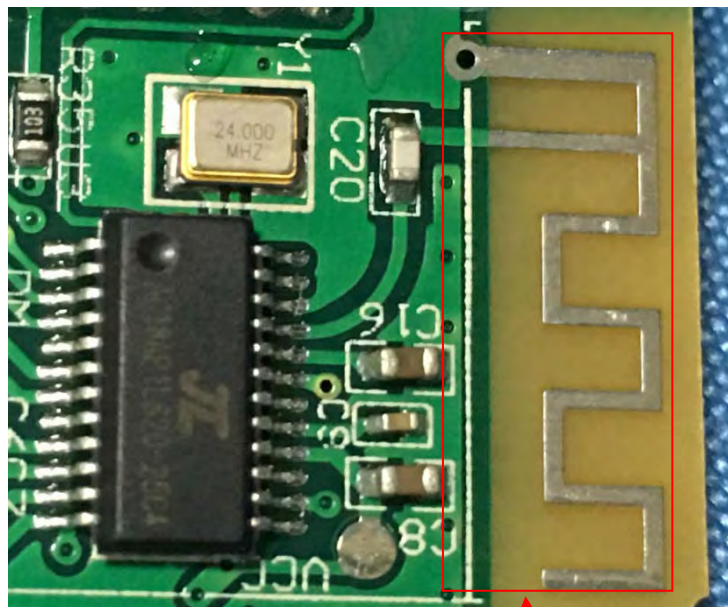
## 14.ANTENNA REQUIREMENT

### 14.1.The Requirement

According to Section 15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used with the device.

### 14.2.Antenna Construction

Device is equipped with permanent attached antenna, which isn't displaced by other antenna. The Max Antenna gain of EUT is -0.68dBi. Therefore, the equipment complies with the antenna requirement of Section 15.203.



Antenna

\*\*\*\*\* End of Test Report \*\*\*\*\*