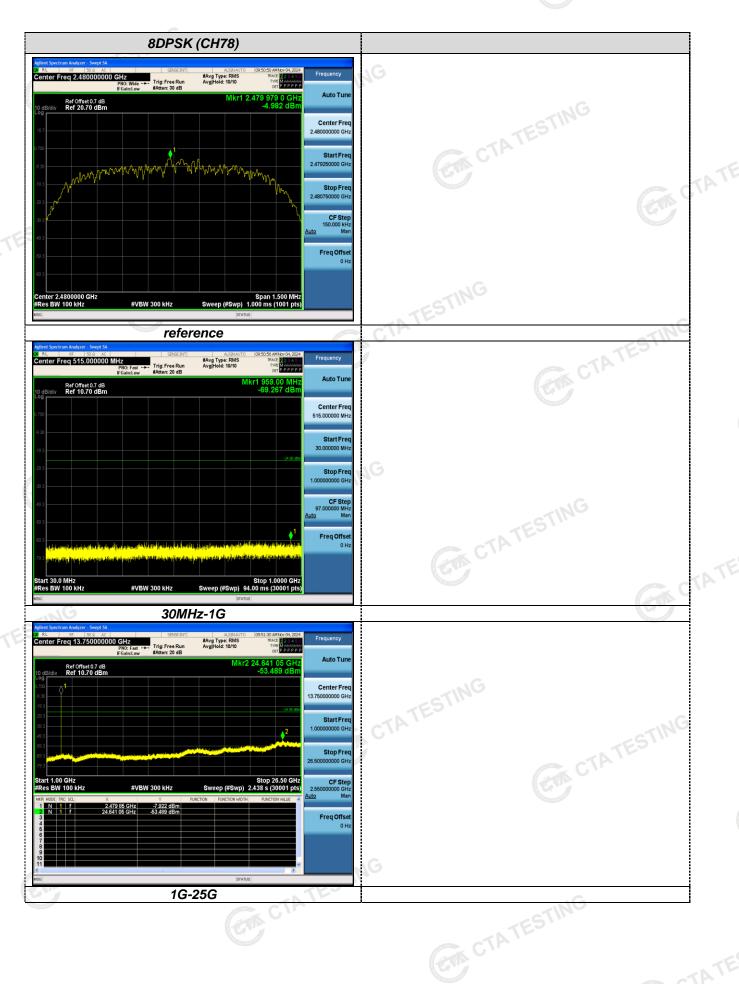


Page 36 of 51 Report No.: CTA24102900601



Page 37 of 51 Report No.: CTA24102900601

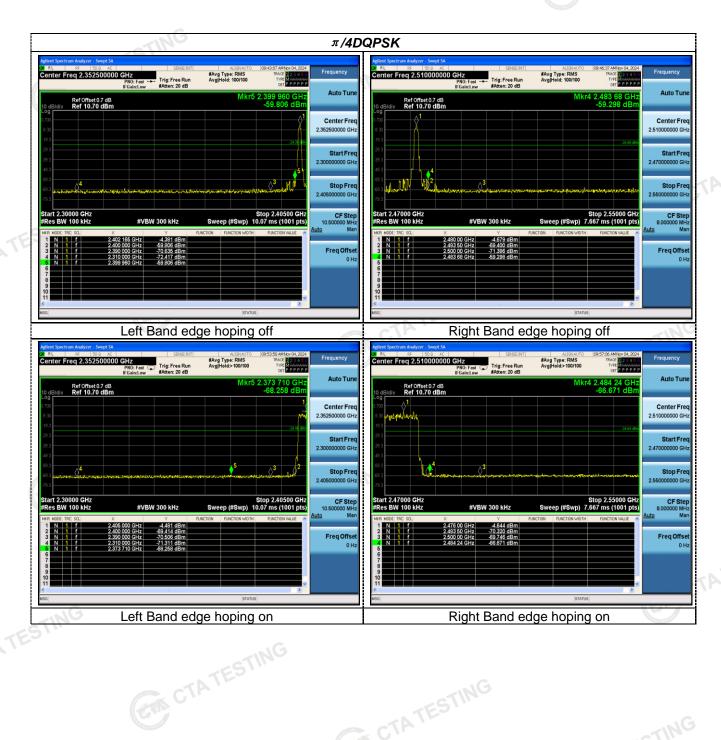
Band-edge Measurements for RF Conducted Emissions: **GFSK** #Avg Type: RMS Avg|Hold: 100/100 #Avg Type: RMS Avg|Hold: 100/100 Ref Offset 0.7 dB Ref 10.70 dBm Ref Offset 0.7 dB Ref 10.70 dBm Center Fre Stop 2.40500 GHz Sweep (#Swp) 10.07 ms (1001 pts) CF Step 8.000000 MH Stop 2.55000 GHz Sweep (#Swp) 7.667 ms (1001 pts) CF Ste 10.500000 MH Freq Offse Freq Offset Right Band edge hoping off Left Band edge hoping off RL RF 50 R AC |
Nter Freq 2.510000000 GHz
PNO: Fast PNO: Fast Atten: 20 dB #Avg Type: RMS Avg|Hold:>100/100 #Avg Type: RMS AvalHold>100/100 Auto Tun Auto Tun Ref Offset 0.7 dB Ref 10.70 dBm Ref Offset 0.7 dB Ref 10.70 dBm Center Fre YYYYYYY Stop Fre Stop Fre Stop 2.55000 GHz Sweep (#Swp) 7.667 ms (1001 pts) CF Ste CF Step #VBW 300 kHz #VBW 300 kHz -70.107 dBr -70.455 dBr -66.960 dBr Freq Offset 0 Hz Freq Offse

Left Band edge hoping on

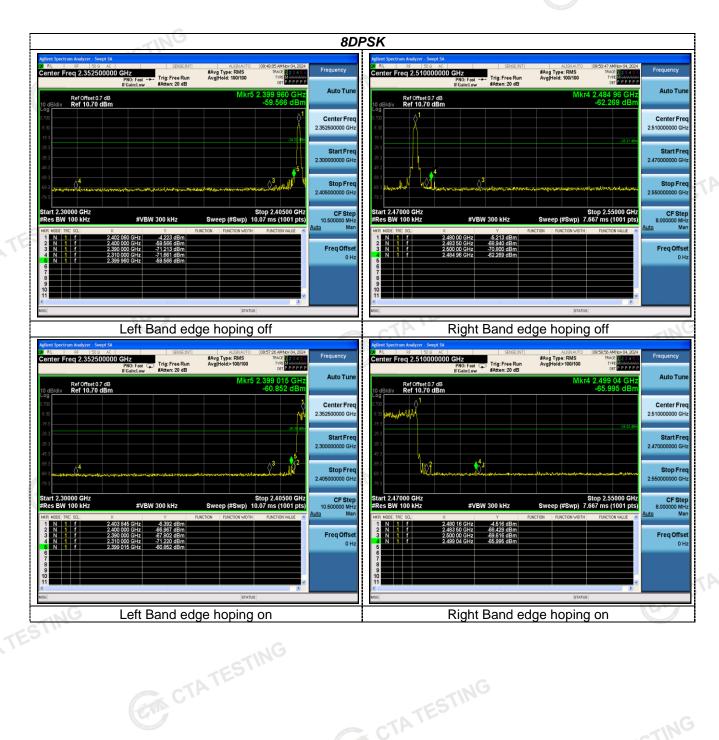
CTATESTING

Right Band edge hoping on

Page 38 of 51 Report No.: CTA24102900601



Page 39 of 51 Report No.: CTA24102900601



Page 40 of 51 Report No.: CTA24102900601

Pseudorandom Frequency Hopping Sequence

TEST APPLICABLE

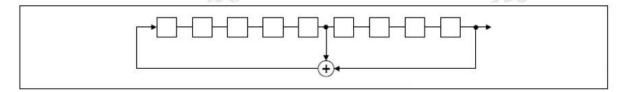
For 47 CFR Part 15C section 15.247 (a) (1) requirement:

Frequency hopping systems shall have hopping channel carrier frequencies separated by a minimum of 25 kHz or the 20 dB bandwidth of the hop-ping 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 hop-ping channel bandwidths of their corresponding transmitters and shall shift frequencies in synchronization with the transmitted signals.

EUT Pseudorandom Frequency Hopping Sequence Requirement

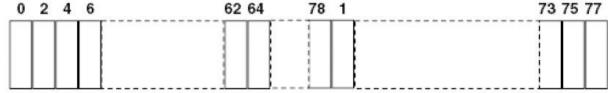
The pseudorandom frequency hopping sequence may be generated in a nice-stage shift register whose 5th and 9th stage outputs are added in a modulo-two addition stage. And the result is fed back to the input of the first stage. The sequence begins with the first one of 9 consecutive ones, for example: the shift register is initialized with nine ones.

- Number of shift register stages:9
- Length of pseudo-random sequence:29-1=511 bits
- Longest sequence of zeros:8(non-inverted signal)



Linear Feedback Shift Register for Generation of the PRBS sequence

An example of pseudorandom frequency hopping sequence as follows:



Each frequency used equally one the average by each transmitter.

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

Page 41 of 51 Report No.: CTA24102900601

4.10 Antenna Requirement

Standard Applicable

For intentional device, according to FCC 47 CFR 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.

And according to FCC 47 CFR Section 15.247 (c), if transmitting antennas of directional gain greater than 6dBi are used, the power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6dBi.

Refer to statement below for compliance

The manufacturer may design the unit so that the user can replace a broken antenna, but the use of a standard antenna jack or electrical connector is prohibited. Further, this requirement does not apply to intentional radiators that must be professionally installed.

Antenna Connected Construction

The maximum gain of antenna was 1.73 dBi.

Remark: The antenna gain is provided by the customer, if the data provided by the customer is not accurate, Shenzhen CTA Testing Technology Co., Ltd. does not assume any responsibility. CTATES

Report No.: CTA24102900601 Page 42 of 51

Test Setup Photos of the EUT





Page 43 of 51 Report No.: CTA24102900601

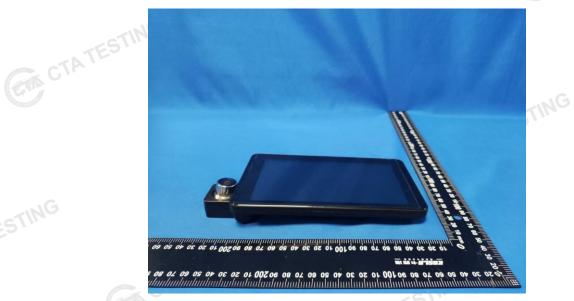
Photos of the EUT







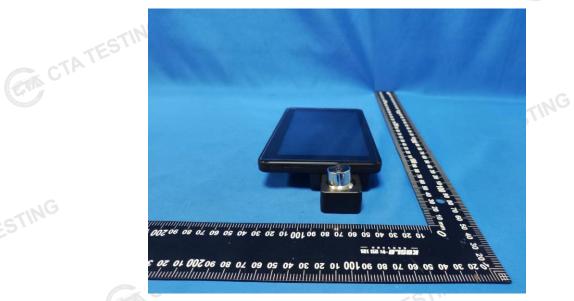
Report No.: CTA24102900601 Page 44 of 51

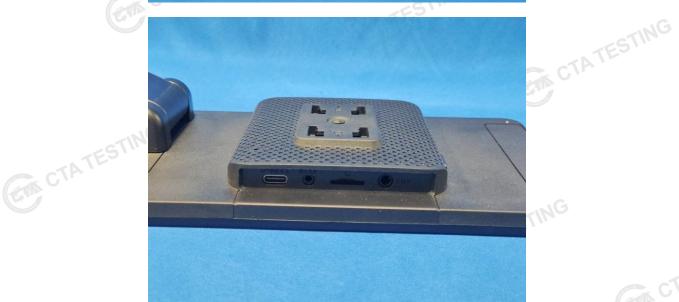






Report No.: CTA24102900601 Page 45 of 51







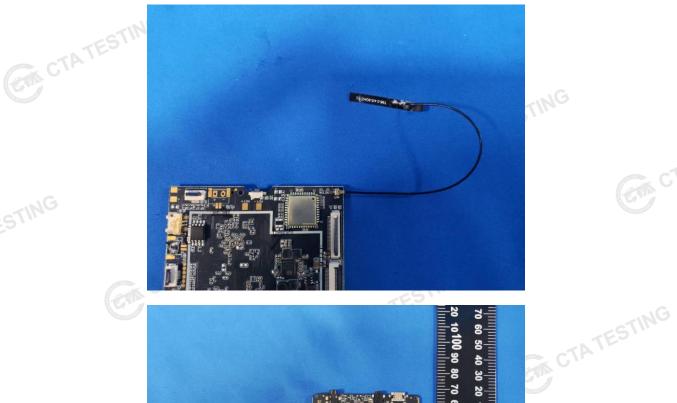
Report No.: CTA24102900601 Page 46 of 51

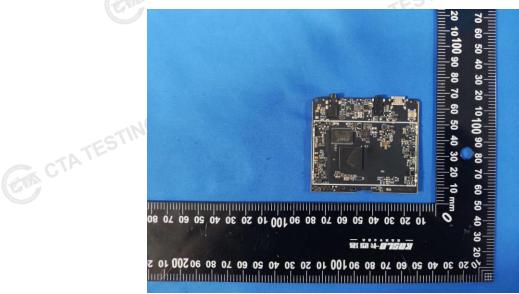






Page 47 of 51 Report No.: CTA24102900601



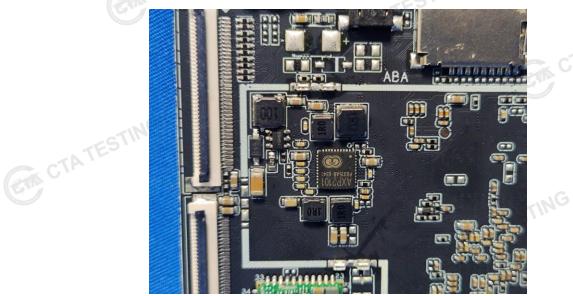


TING



Report No.: CTA24102900601 Page 48 of 51







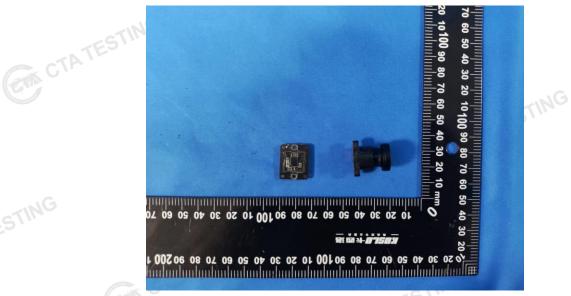
Report No.: CTA24102900601 Page 49 of 51

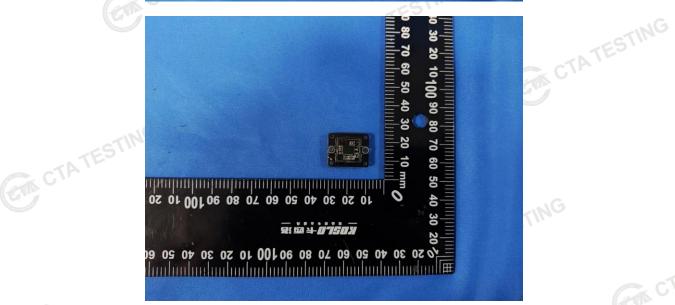






Page 50 of 51 Report No.: CTA24102900601







Page 51 of 51 Report No.: CTA24102900601

