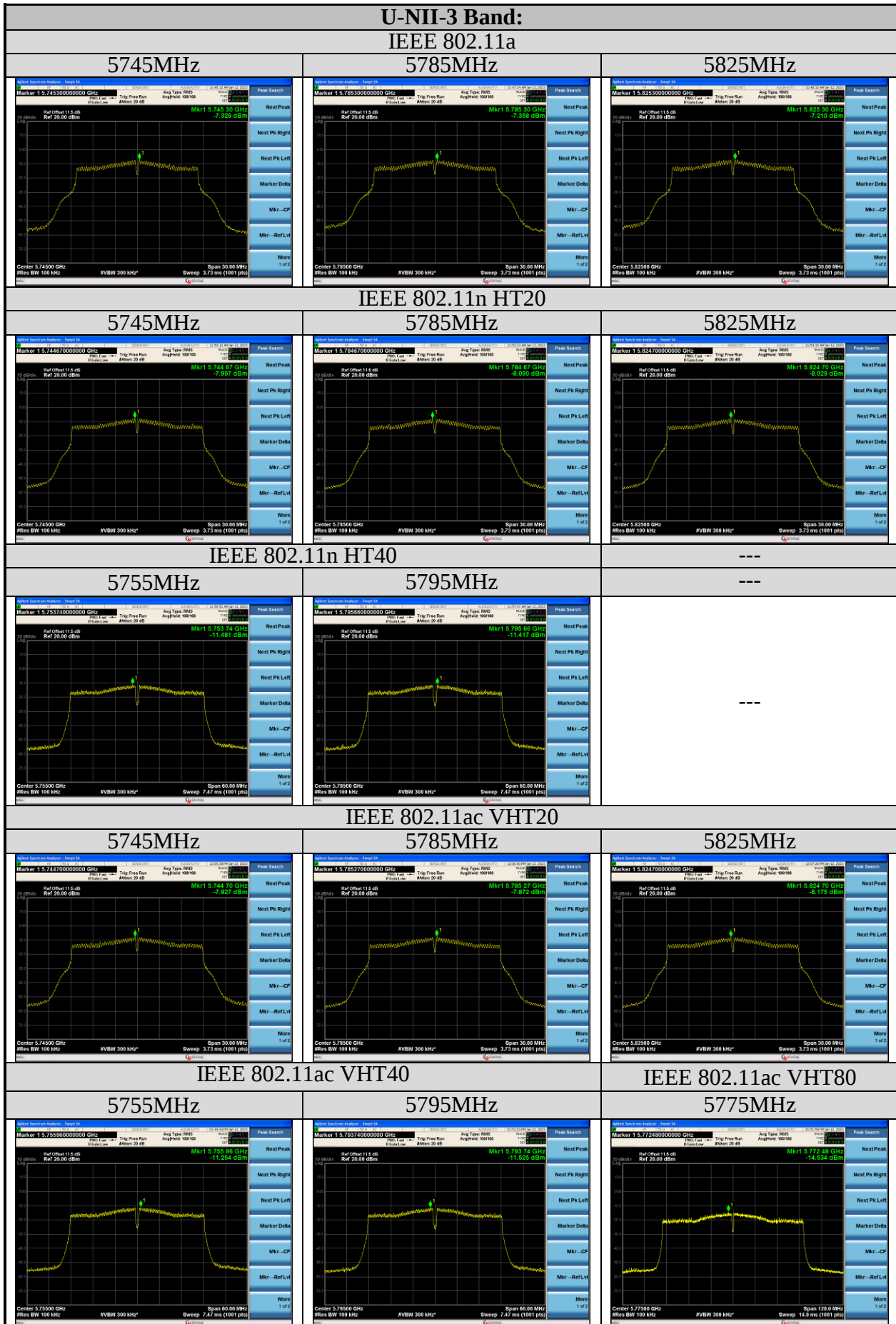




10.FREQUENCY STABILITY MEASUREMENT

10.1.Test Equipments

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
1.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Apr.07,22	1 Year
2.	Attenuator	Agilent	8491B	MY39269201	Oct.09,22	1 Year
3.	RF Cable	eastsheep	141-SMA-JJ-1000	NO.7	Oct.09,22	1 Year

10.2.Limit

Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user's manual.

10.3.Test Procedure

1. The transmitter output (antenna port) was connected to the spectrum analyzer.
EUT have transmitted absence of modulation signal and fixed channelise. Set the spectrum analyzer span to view the entire absence of modulation emissions bandwidth. Set RBW = 10 kHz, VBW = 10 kHz with peak detector and maxhold settings. fc is declaring of channel frequency. Then the frequency error formula is $(f_c - f)/f \times 10^{-6}$ ppm. The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.
2. Extreme temperature rule is 0°C~50°C.

10.4. Test Result

EUT: Room Booking Panel		
M/N: IAD-18010A		
Test date: 2023-01-12	Pressure: 102.1±1.0 kpa	Humidity: 53.2±3.0%
Tested by: Carl	Test site: RF site	Temperature: 22.3±0.6 °C

Frequency Stability vs. Voltage:

Test Voltage	Temperature	CH	Max. Reading (MHz)	Target Frequency (MHz)	Result (ppm)
AC 120V	25°C	CH36	5179.9970	5180	0.58
		CH38	5189.9955	5190	0.87
		CH40	5199.9950	5200	0.96
		CH42	5209.9950	5210	-0.96
		CH46	5229.9945	5230	-1.05
		CH48	5239.9945	5240	-1.05
		CH149	5744.9940	5745	-1.04
		CH151	5754.9940	5755	-1.04
		CH155	5774.9940	5775	-1.04
		CH157	5784.9940	5785	-1.04
		CH159	5794.9940	5795	-1.04
		CH165	5824.9935	5825	-1.12
AC 120V	0°C	CH36	5179.9965	5180	-0.68
		CH38	5189.9965	5190	-0.67
		CH40	5199.9950	5200	-0.96
		CH42	5209.9950	5210	-0.96
		CH46	5229.9955	5230	-0.86
		CH48	5239.9955	5240	-0.86
		CH149	5744.9940	5745	-1.04
		CH151	5754.9945	5755	-0.96
		CH155	5774.9945	5775	-0.95
		CH157	5784.9945	5785	-0.95
		CH159	5794.9940	5795	-1.04
		CH165	5824.9935	5825	-1.12

AC 120V	50°C	CH36	5179.9960	5180	-0.77
		CH38	5189.9955	5190	-0.87
		CH40	5199.9955	5200	-0.87
		CH42	5209.9955	5210	-0.86
		CH46	5229.9945	5230	-1.05
		CH48	5239.9945	5240	-1.05
		CH149	5744.9940	5745	-1.04
		CH151	5754.9940	5755	-1.04
		CH155	5774.9940	5775	-1.04
		CH157	5784.9940	5785	-1.04
		CH159	5794.9935	5795	-1.12
		CH165	5824.9935	5825	-1.12

Frequency Stability vs. Temperature:

Test Voltage	Temperature	CH	Max. Reading (MHz)	Target Frequency (MHz)	Result (ppm)
AC 96V	25℃	CH36	5179.9970	5180	-0.58
		CH38	5189.9955	5190	-0.87
		CH40	5199.9950	5200	-0.96
		CH42	5209.9945	5210	-1.06
		CH46	5229.9945	5230	-1.05
		CH48	5239.9945	5240	-1.05
		CH149	5744.9940	5745	-1.04
		CH151	5754.9940	5755	-1.04
		CH155	5774.9940	5775	-1.04
		CH157	5784.9940	5785	-1.04
		CH159	5794.9940	5795	-1.04
		CH165	5824.9935	5825	-1.12
AC 96V	0℃	CH36	5179.9965	5180	-0.68
		CH38	5189.9950	5190	-0.96
		CH40	5199.9950	5200	-0.96
		CH42	5209.9950	5210	-0.96
		CH46	5229.9945	5230	-1.05
		CH48	5239.9945	5240	-1.05
		CH149	5744.9940	5745	-1.04
		CH151	5754.9940	5755	-1.04
		CH155	5774.9940	5775	-1.04
		CH157	5784.9940	5785	-1.04
		CH159	5794.9940	5795	-1.04
		CH165	5824.9940	5825	-1.03

AC 97V	50℃	CH36	5179.9965	5180	-0.68
		CH38	5189.9955	5190	-0.87
		CH40	5199.9955	5200	-0.87
		CH42	5209.9955	5210	-0.86
		CH46	5229.9950	5230	-0.96
		CH48	5239.9950	5240	-0.95
		CH149	5744.9940	5745	-1.04
		CH151	5754.9940	5755	-1.04
		CH155	5774.9940	5775	-1.04
		CH157	5784.9935	5785	-1.12
		CH159	5794.9935	5795	-1.12
		CH165	5824.9935	5825	-1.12
AC 138V	25℃	CH36	5179.9960	5180	-0.77
		CH38	5189.9955	5190	-0.87
		CH40	5199.9955	5200	-0.87
		CH42	5209.9945	5210	-1.06
		CH46	5229.9945	5230	-1.05
		CH48	5239.9945	5240	-1.05
		CH149	5744.9945	5745	-0.96
		CH151	5754.9945	5755	-0.96
		CH155	5774.9945	5775	-0.95
		CH157	5784.9945	5785	-0.95
		CH159	5794.9940	5795	-1.04
		CH165	5824.9940	5825	-1.03
AC 138V	0℃	CH36	5179.9970	5180	-0.58
		CH38	5189.9960	5190	-0.77
		CH40	5199.9955	5200	-0.87
		CH42	5209.9955	5210	-0.86
		CH46	5229.9955	5230	-0.86
		CH48	5239.9955	5240	-0.86
		CH149	5744.9940	5745	-1.04
		CH151	5754.9940	5755	-1.04
		CH155	5774.9945	5775	-0.95
		CH157	5784.9940	5785	-1.04
		CH159	5794.9940	5795	-1.04
		CH165	5824.9935	5825	-1.12

AC 138V	50℃	CH36	5179.9965	5180	-0.68
		CH38	5189.9950	5190	-0.96
		CH40	5199.9950	5200	-0.96
		CH42	5209.9945	5210	-1.06
		CH46	5229.9945	5230	-1.05
		CH48	5239.9945	5240	-1.05
		CH149	5744.9950	5745	-0.87
		CH151	5754.9950	5755	-0.87
		CH155	5774.9950	5775	-0.87
		CH157	5784.9950	5785	-0.86
		CH159	5794.9950	5795	-0.86
		CH165	5824.9945	5825	-0.94

11. ANTENNA REQUIREMENT

11.1. 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 15.407 (a), 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.

11.2. Antenna Connected Construction

The antennas used for this product are FPC antenna that no antenna other than that furnished by the responsible party shall be used with the device, the maximum peak gain of the transmit antenna is **U-NII-1 Band: 3.5dBi; U-NII-3 Band: 5.1dBi.**

12. DEVIATION TO TEST SPECIFICATIONS

[NONE]

..... THE END