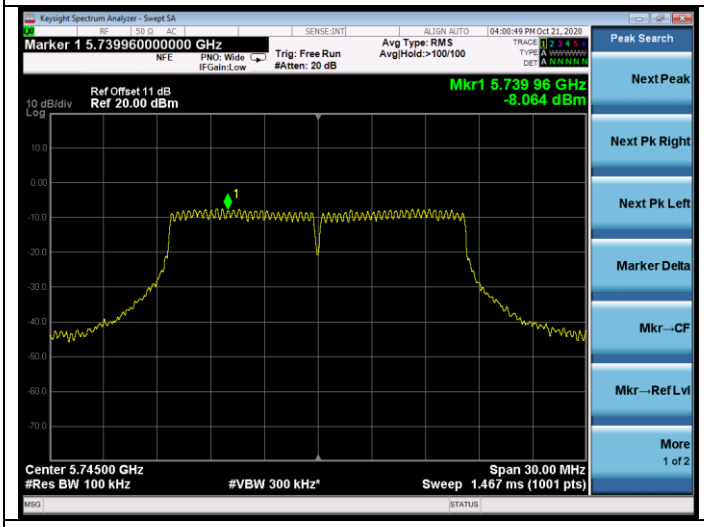
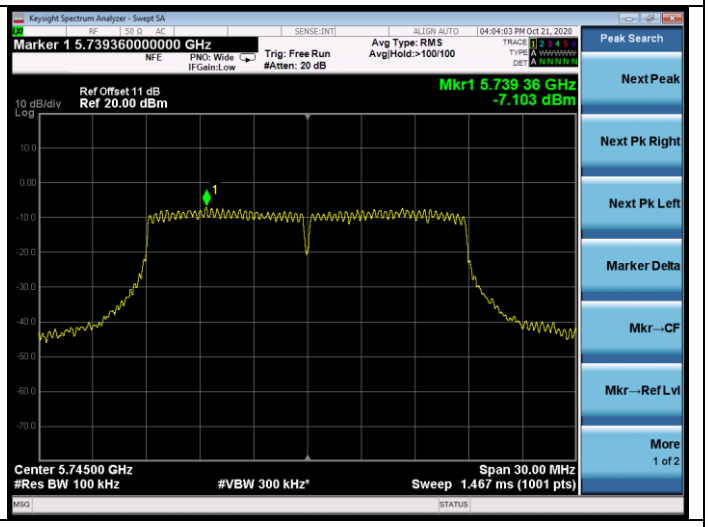
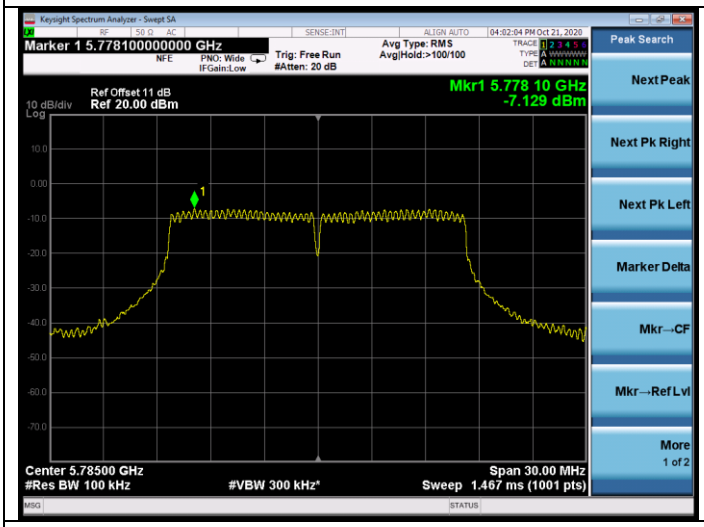
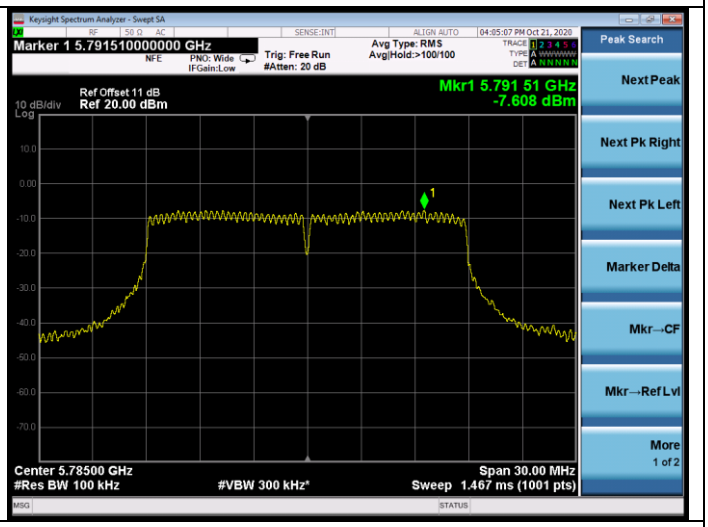
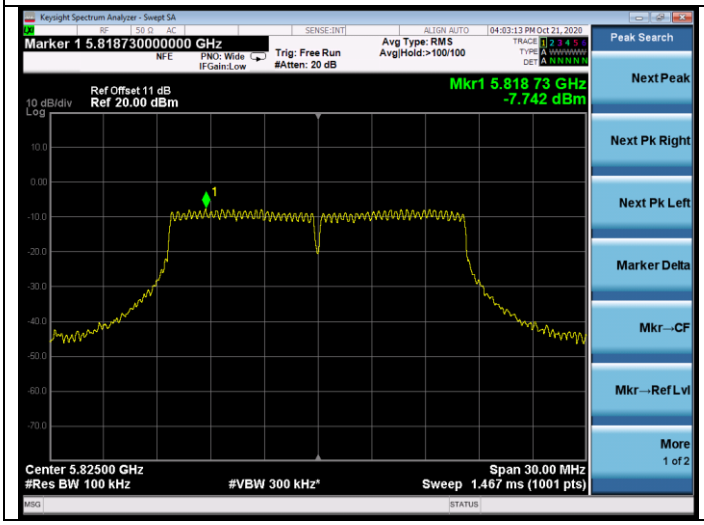
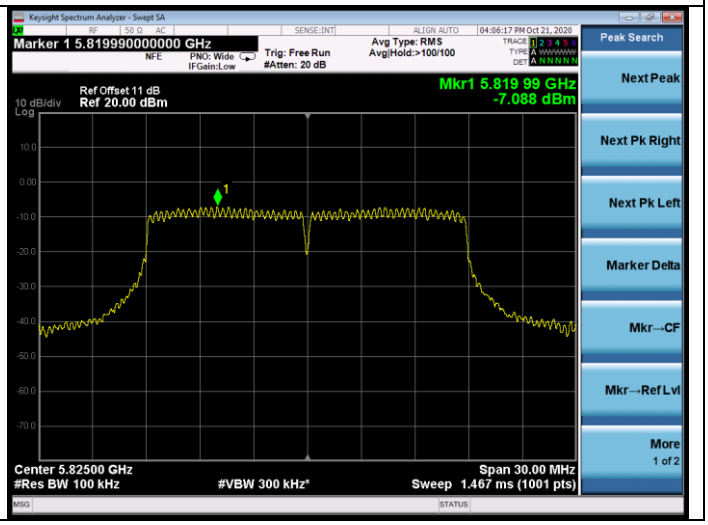
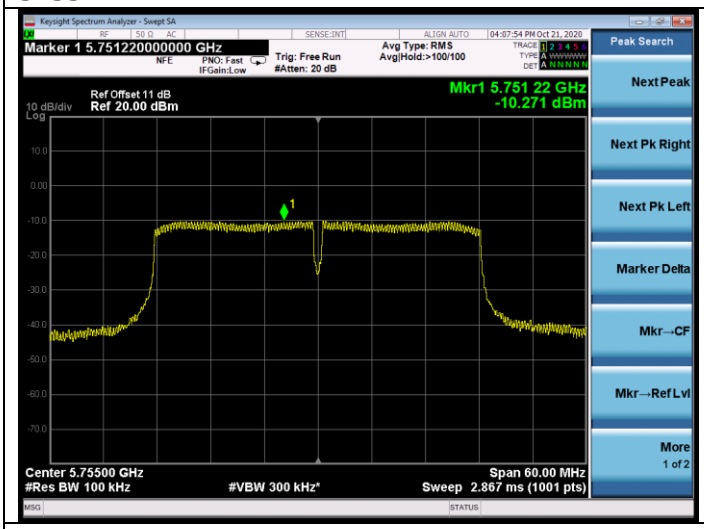
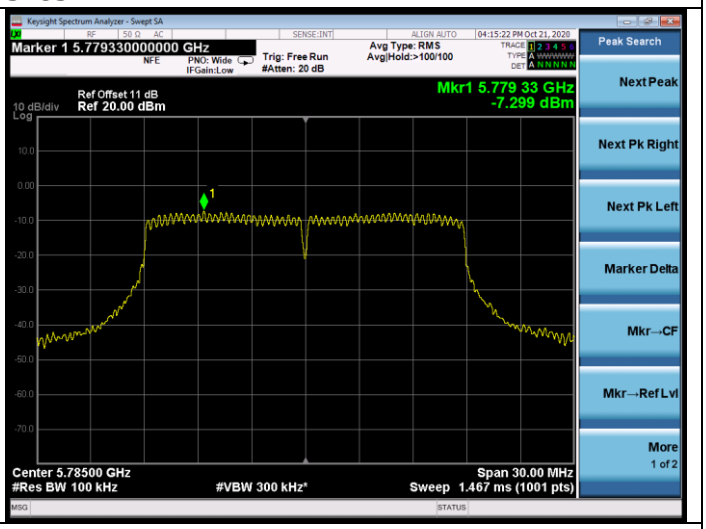
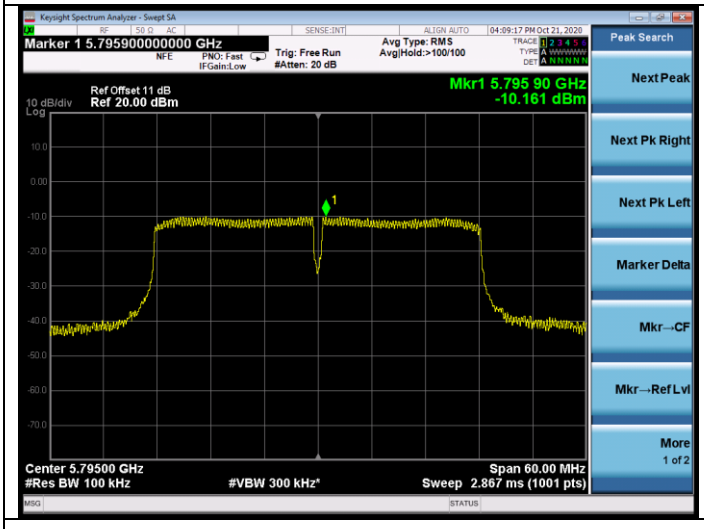
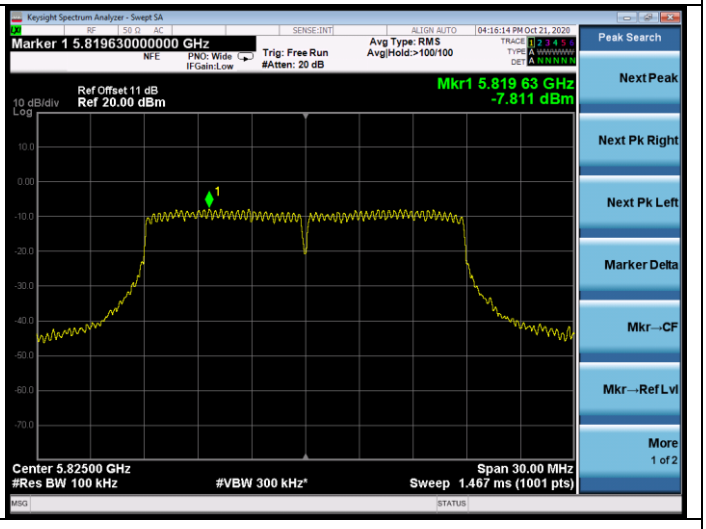
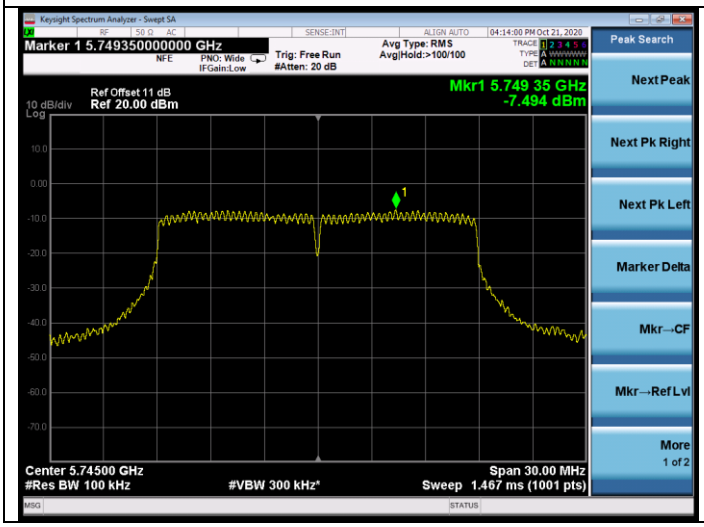
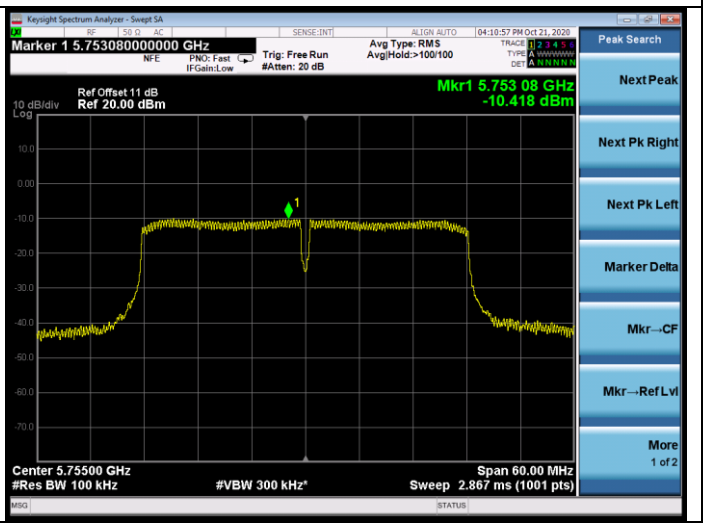
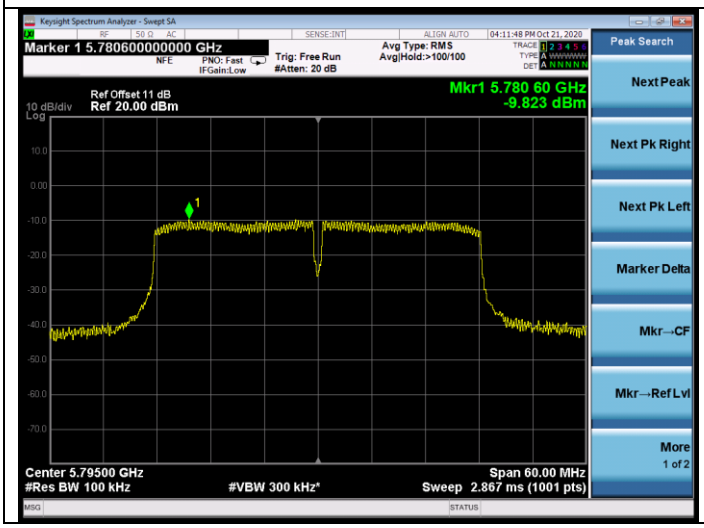
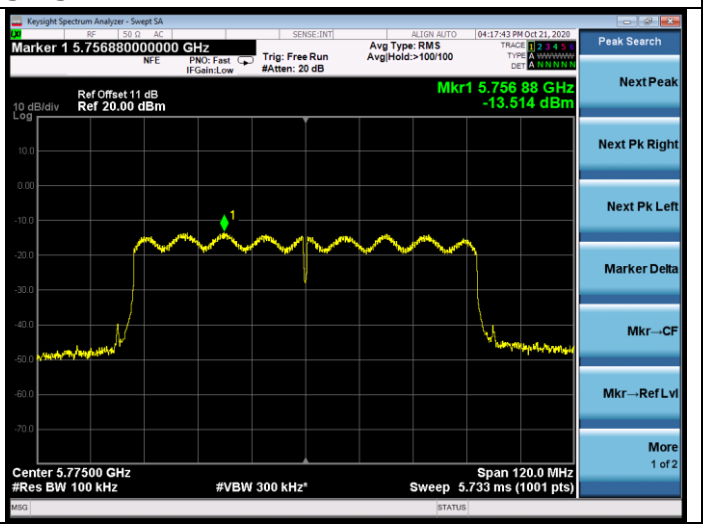
U-NII-3 Band:	
ANT B	
11a	11n HT20
5745MHz	5745MHz
	
5785MHz	5785MHz
	
5825MHz	5825MHz
	

11n HT40	
5755MHz	5785MHz
	
5795MHz	5825MHz
	
11ac VHT20	11ac VHT40
5745MHz	5755MHz
	

	11ac VHT80
5795MHz	5775MHz
	

10. FREQUENCY STABILITY MEASUREMENT

10.1. Test Equipment

Item	Equipment	Manufacturer	Model No.	Serial No.	Last Cal.	Cal. Interval
4.	PXA Signal Analyzer	Agilent	N9030A	MY51380221	Apr.12,20	1 Year
5.	Attenuator	Agilent	8491B	MY39269201	Oct.12,20	1 Year
6.	RF Cable	EMCI	EMC102-KM-KM 3500	170702	Apr.12,20	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 $(fc-f)/f \times 10^{-6}$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 -30℃~50℃.

10.4.Test Result

EUT: WiFi module		
M/N: U9W34		
Test date: 2020-10-26	Pressure: 102.7±1.0 kpa	Humidity: 52.5±3.0%
Tested by: Leo	Test site: RF site	Temperature:22.7±0.6 ℃

Frequency Stability vs.Voltage:

Test Voltage	Temperature	CH	Max. Reading (MHz)	Target Frequency (MHz)	Result (ppm)
DC 2.81V	20℃	CH36	5179.9715	5180	-5.50
		CH38	5189.9725	5190	-5.30
		CH40	5199.9710	5200	-5.58
		CH42	5209.9705	5210	-5.66
		CH46	5229.9705	5230	-5.64
		CH48	5239.9705	5240	-5.63
		CH149	5744.9705	5745	-5.13
		CH151	5754.9730	5755	-4.69
		CH155	5774.9675	5775	-5.63
		CH157	5784.9700	5785	-5.19
		CH159	5794.9715	5795	-4.92
		CH165	5824.9695	5825	-5.24
DC 3.3V	20℃	CH36	5179.9730	5180	-5.21
		CH38	5189.9720	5190	-5.39
		CH40	5199.9715	5200	-5.48
		CH42	5209.9710	5210	-5.57
		CH46	5229.9710	5230	-5.54
		CH48	5239.9710	5240	-5.53
		CH149	5744.9710	5745	-5.05
		CH151	5754.9685	5755	-5.47
		CH155	5774.9710	5775	-5.02
		CH157	5784.9700	5785	-5.19
		CH159	5794.9710	5795	-5.00
		CH165	5824.9695	5825	-5.24

DC 3.8V	20℃	CH36	5179.9960	5180	-0.77
		CH38	5189.9955	5190	-0.96
		CH40	5199.9960	5200	-0.77
		CH42	5209.9935	5210	-1.34
		CH46	5229.9655	5230	-6.69
		CH48	5239.9940	5240	-1.15
		CH149	5744.9935	5745	-1.22
		CH151	5754.9920	5755	-1.39
		CH155	5774.9930	5775	-1.21
		CH157	5784.9920	5785	-1.38
		CH159	5794.9965	5795	-0.69
		CH165	5824.9930	5825	-1.20

Frequency Stability vs.Temperature:

Test Voltage	Temperature	CH	Max. Reading (MHz)	Target Frequency (MHz)	Result (ppm)
DC 3.3V	0℃	CH36	5179.9840	5180	-3.09
		CH38	5189.9560	5190	-8.48
		CH40	5199.9350	5200	-12.50
		CH42	5209.9270	5210	-14.03
		CH46	5229.9270	5230	-13.95
		CH48	5239.9390	5240	-11.54
		CH149	5744.9690	5745	-5.40
		CH151	5754.9690	5755	-5.34
		CH155	5774.9630	5775	-6.41
		CH157	5784.9630	5785	-6.40
		CH159	5794.9960	5795	-0.67
		CH165	5824.9940	5825	-1.05
DC 3.3V	10℃	CH36	5179.9890	5180	-2.15
		CH38	5189.9890	5190	-2.13
		CH40	5199.99600	5200	-0.79
		CH42	5209.9875	5210	-2.50
		CH46	5229.9875	5230	-2.49
		CH48	5239.9850	5240	-2.83
		CH149	5744.9915	5745	-1.56
		CH151	5754.9915	5755	-1.54
		CH155	5774.9930	5775	-1.20
		CH157	5784.9980	5785	-0.35
		CH159	5794.9920	5795	-1.36
		CH165	5824.9920	5825	-1.37

DC 3.3V	20℃	CH36	5179.9930	5180	-1.35
		CH38	5189.9925	5190	-1.54
		CH40	5199.9925	5200	-1.53
		CH42	5209.9930	5210	-1.32
		CH46	5229.9615	5230	-7.41
		CH48	5239.9985	5240	-0.37
		CH149	5744.9955	5745	-0.87
		CH151	5754.9960	5755	-0.72
		CH155	5774.9910	5775	-1.56
		CH157	5784.9960	5785	-0.66
		CH159	5794.9940	5795	-1.04
		CH165	5824.9940	5825	-1.02
DC 3.3V	30℃	CH36	5179.9960	5180	-0.77
		CH38	5189.9920	5190	-1.53
		CH40	5199.9960	5200	-0.77
		CH42	5209.9940	5210	-1.15
		CH46	5229.9650	5230	-6.65
		CH48	5239.9910	5240	-1.72
		CH149	5744.9960	5745	-0.71
		CH151	5754.9970	5755	-0.52
		CH155	5774.9960	5775	-0.70
		CH157	5784.9920	5785	-1.39
		CH159	5794.9940	5795	-1.03
		CH165	5824.9960	5825	-0.68
DC 3.3V	40℃	CH36	5179.9930	5180	-1.35
		CH38	5189.9925	5190	-1.52
		CH40	5199.9960	5200	-0.76
		CH42	5209.9925	5210	-1.51
		CH46	5229.9955	5230	-0.95
		CH48	5239.9960	5240	-0.77
		CH149	5744.9955	5745	-0.87
		CH151	5754.9970	5755	-0.52
		CH155	5774.9965	5775	-0.68
		CH157	5784.9940	5785	-1.03
		CH159	5794.9960	5795	-0.69
		CH165	5824.9940	5825	-1.01

DC 3.3V	50℃	CH36	5179.9970	5180	-0.59
		CH38	5189.9960	5190	-0.77
		CH40	5199.9940	5200	-1.15
		CH42	5209.9920	5210	-1.53
		CH46	5229.9950	5230	-0.95
		CH48	5239.9920	5240	-1.53
		CH149	5744.9990	5745	-0.16
		CH151	5754.9930	5755	-1.21
		CH155	5774.9940	5775	-1.03
		CH157	5784.9920	5785	-1.39
		CH159	5794.9930	5795	-1.20
		CH165	5824.9940	5825	-1.01
DC 3.3V	60℃	CH36	5179.9980	5180	-0.38
		CH38	5189.9945	5190	-1.15
		CH40	5199.9960	5200	-0.79
		CH42	5209.9935	5210	-1.32
		CH46	5229.9945	5230	-1.16
		CH48	5239.9945	5240	-1.17
		CH149	5744.9950	5745	-0.86
		CH151	5754.9950	5755	-0.83
		CH155	5774.9935	5775	-1.21
		CH157	5784.9925	5785	-1.34
		CH159	5794.9945	5795	-1.02
		CH165	5824.9950	5825	-0.88

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 monopole 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:**ANT A: 1.90dBi & ANT B: 0.8dBi; **U-NII-3 Band:**ANT A: -0.04dBi & ANT B: -3.17dBi.

12. DEVIATION TO TEST SPECIFICATIONS

[NONE]

THE END