

Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency(MHz):	5210
Test mode:	802.11ac(VHT80)	Mode	MIMO

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
1892.68	V	38.39	-56.84	-27.00	-29.84
13177.41	V	52.23	-43.00	-27.00	-16.00
18057.94	V	54.16	-41.07	-27.00	-14.07
1930.08	H	37.58	-57.65	-27.00	-30.65
14364.50	H	52.57	-42.65	-27.00	-15.65
17941.82	H	53.64	-41.59	-27.00	-14.59

Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
1892.68	V	38.39	29.01	74.00	54.00	-35.61	-24.99
13177.41	V	52.23	36.28	74.00	54.00	-21.77	-17.72
18057.94	V	54.16	37.46	74.00	54.00	-19.84	-16.54
1930.08	H	37.58	28.40	74.00	54.00	-36.42	-25.6
14364.50	H	52.57	36.13	74.00	54.00	-21.43	-17.87
17941.82	H	53.64	36.88	74.00	54.00	-20.36	-17.12

- Note:** (1) All Readings are Peak Value (VBW=3MHz)  
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
(3)EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77  
d is the measurement distance in 3 meters

● ☒ Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

The 802.11a/n/ac siso and mimo modes has been tested and the worst case mode recorded as below:

Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency(MHz):	5180
Test mode:	802.11a	Mode:	SISO antenna 0

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5149.35	H	48.30	-46.93	-27.00	Pass
5350.00	V	47.25	-47.98	-27.00	Pass

Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
5149.35	H	48.30	33.57	74.00	54.00	-25.70	-20.43
5350.00	V	47.25	33.16	74.00	54.00	-26.75	-20.84

Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency(MHz):	5240
Test mode:	802.11a	Mode:	SISO antenna 0

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5355.61	H	48.42	-46.81	-27.00	Pass
5353.08	V	48.60	-46.63	-27.00	Pass

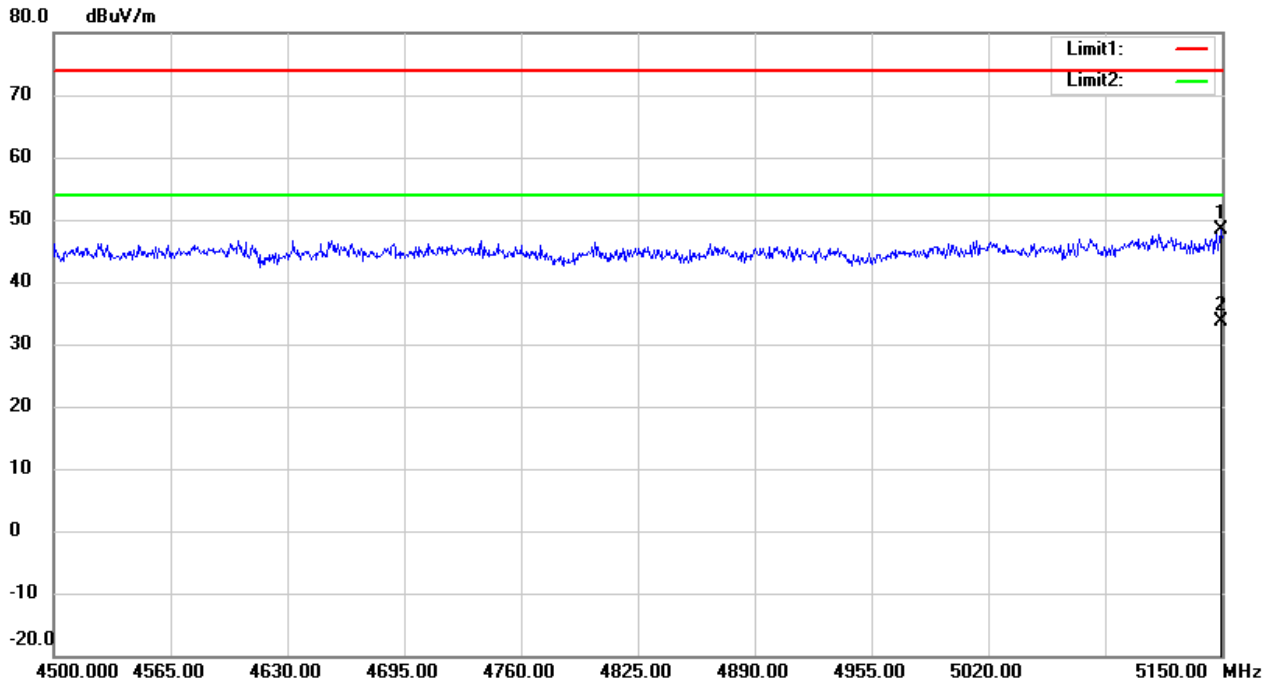
Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
5355.61	H	48.42	33.57	74.00	54.00	-25.58	-20.43
5353.08	V	48.60	32.58	74.00	54.00	-25.40	-21.42

- Note:** (1) All Readings are Peak Value (VBW=300kHz)  
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
 (3)EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77  
 d is the measurement distance in 3 meters

UNII Band I

Test Model Undesirable radiated Spurious Emission in Restricted Band (4500-5150MHz)

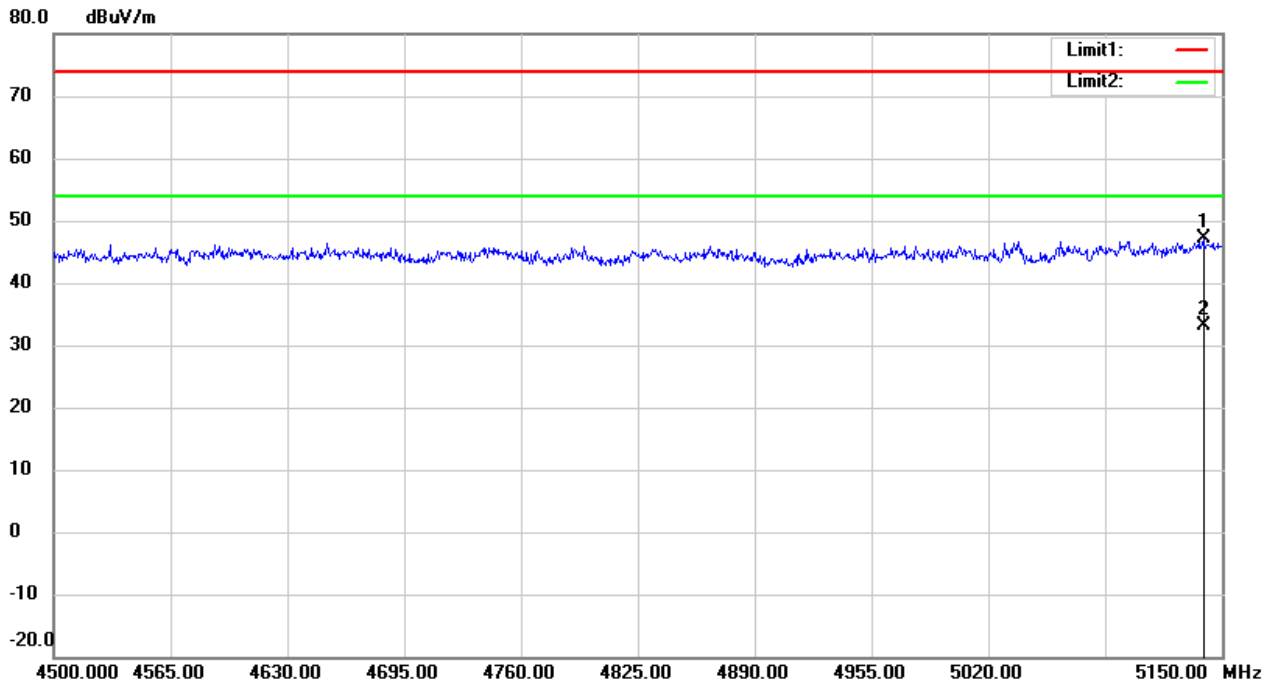
802.11a      802.11n(HT20)      802.11ac(HT20)  
5180      5200      5240      Ant.Pol      H



UNII Band I

Test Model Undesirable radiated Spurious Emission in Restricted Band (4500-5150MHz)

802.11a      802.11n(HT20)      802.11ac(HT20)  
5180      5200      5240      Ant.Pol      V

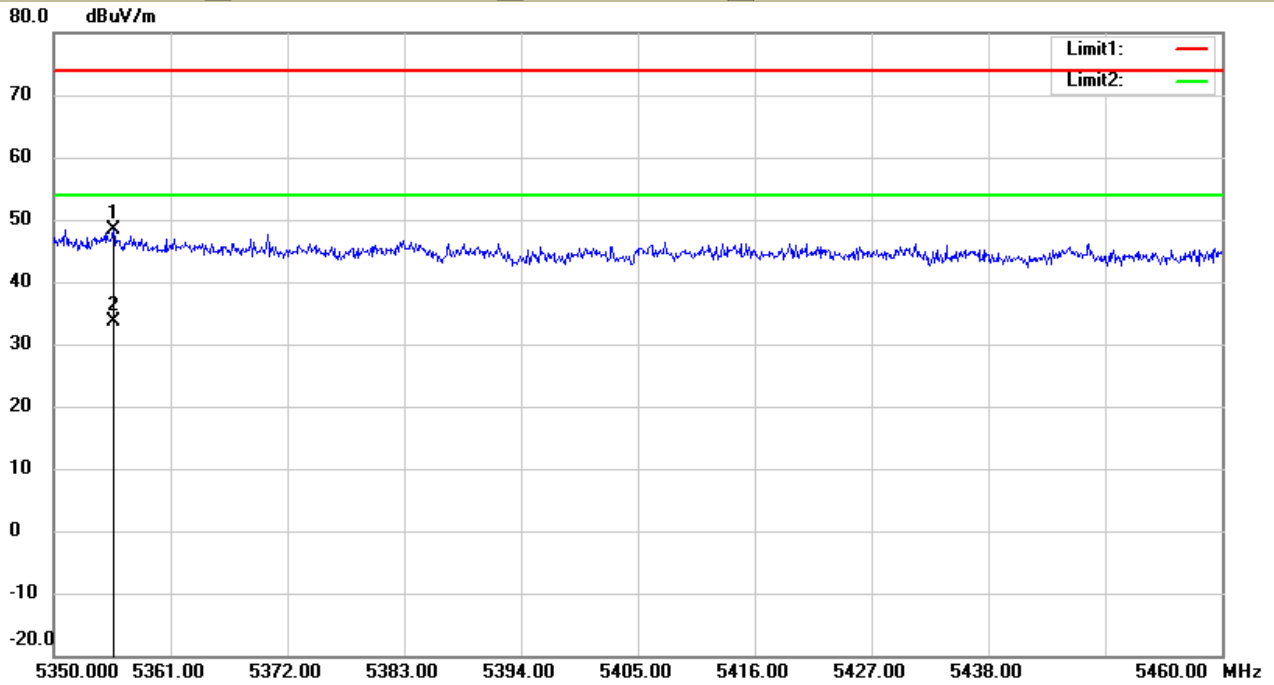


**UNII Band I**

Test Model Undesirable radiated Spurious Emission in Restricted Band (5350-5460MHz )

5180    802.11a    802.11n(HT20)    802.11ac(HT20)

5200    5240    Ant.Pol    H

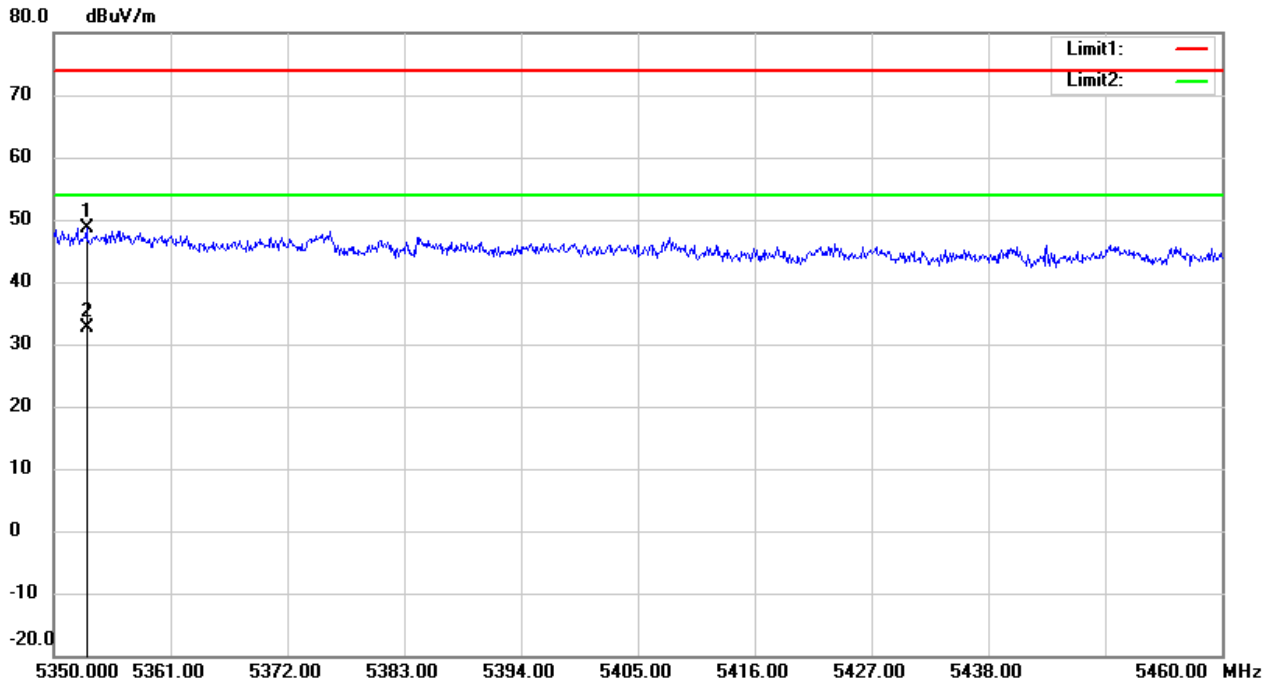


**UNII Band I**

Test Model Undesirable radiated Spurious Emission in Restricted Band (5350-5460MHz )

5180    802.11a    802.11n(HT20)    802.11n(HT40)

5200    5240    Ant.Pol    V



Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency(MHz):	5190
Test mode:	802.11n HT40	Mode:	MIMO

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5149.35	H	45.80	-49.43	-27.00	Pass
5139.60	V	48.25	-46.98	-27.00	Pass

Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
5149.35	H	45.80	31.26	74.00	54.00	-28.20	-22.74
5139.60	V	48.25	35.52	74.00	54.00	-25.75	-18.48

Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency(MHz):	5230
Test mode:	802.11n HT40	Mode:	MIMO

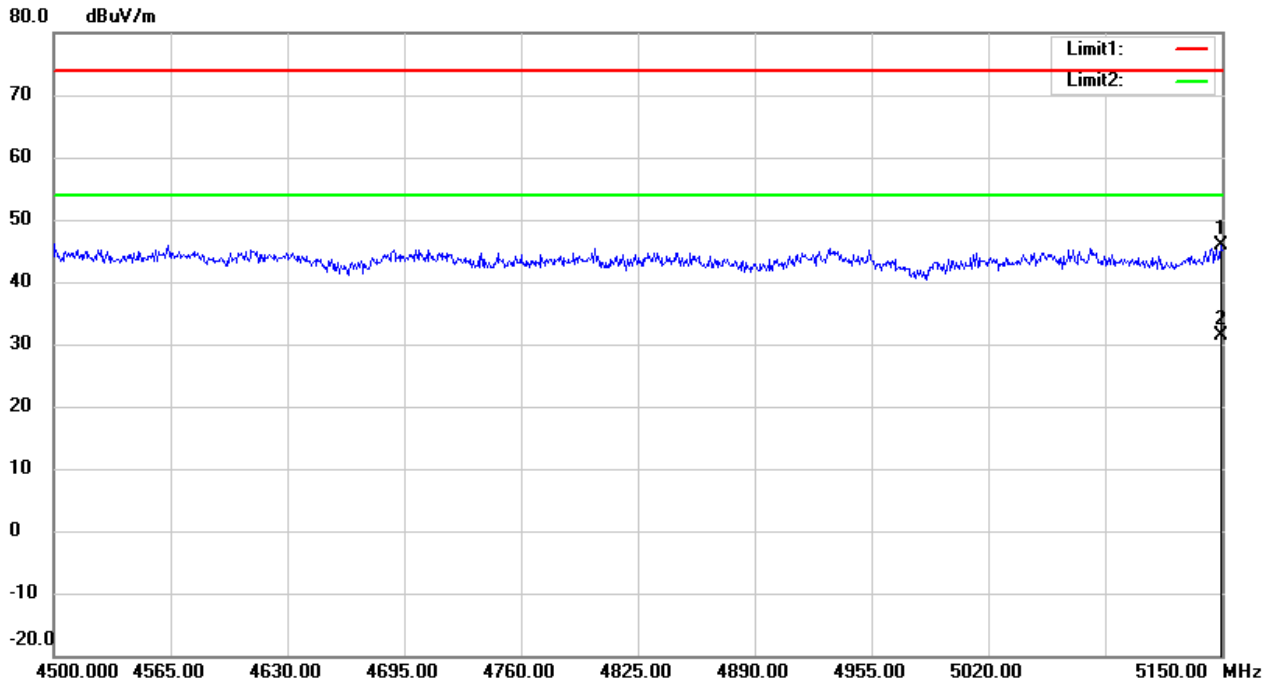
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5351.10	H	48.89	-46.34	-27.00	Pass
5353.08	V	47.80	-47.43	-27.00	Pass

Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
5351.10	H	48.89	33.25	74.00	54.00	-25.11	-20.75
5353.08	V	47.80	32.54	74.00	54.00	-26.20	-21.46

- Note:** (1) All Readings are Peak Value (VBW=300kHz)  
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
(3) EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77  
d is the measurement distance in 3 meters

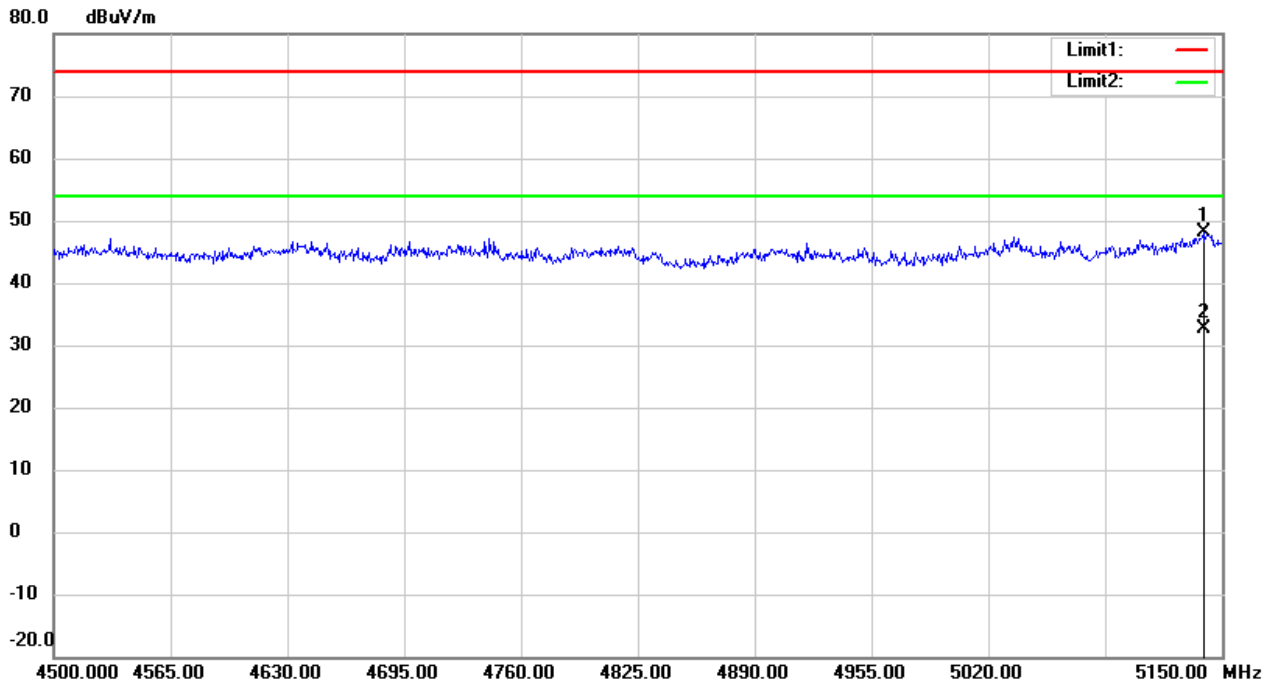
UNII Band I

Test Model	Undesirable radiated Spurious Emission in Restricted Band (4500-5150MHz)				
	<input checked="" type="checkbox"/> 802.11n(HT40)	<input type="checkbox"/> 802.11ac (VHT40)		Ant.Pol	H
	<input checked="" type="checkbox"/> 5190	<input type="checkbox"/> 5230			



UNII Band I

Test Model	Undesirable radiated Spurious Emission in Restricted Band (4500-5150MHz)				
	<input checked="" type="checkbox"/> 802.11n(HT40)	<input type="checkbox"/> 802.11ac (VHT40)		Ant.Pol	V
	<input checked="" type="checkbox"/> 5190	<input type="checkbox"/> 5230			

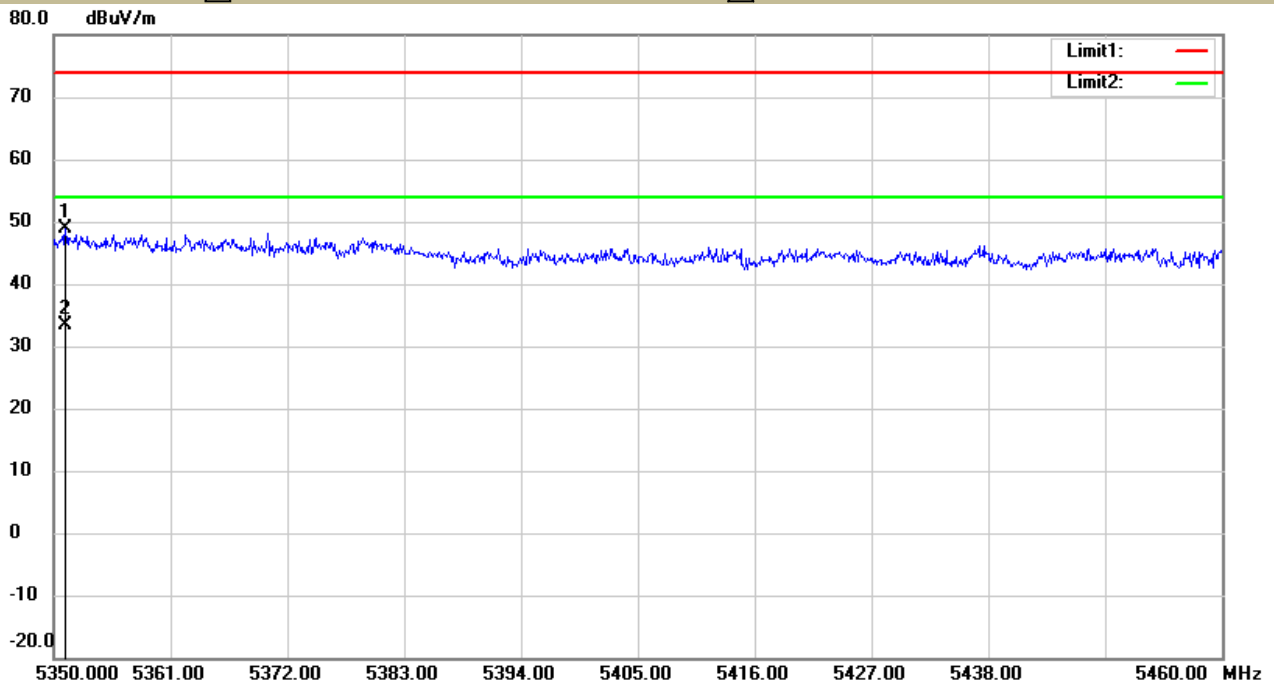


**UNII Band I**

Test Model Undesirable radiated Spurious Emission in Restricted Band (5350-5460MHz )

802.11n(HT40)       802.11ac (VHT40)

5190       5230      Ant. Pol      H

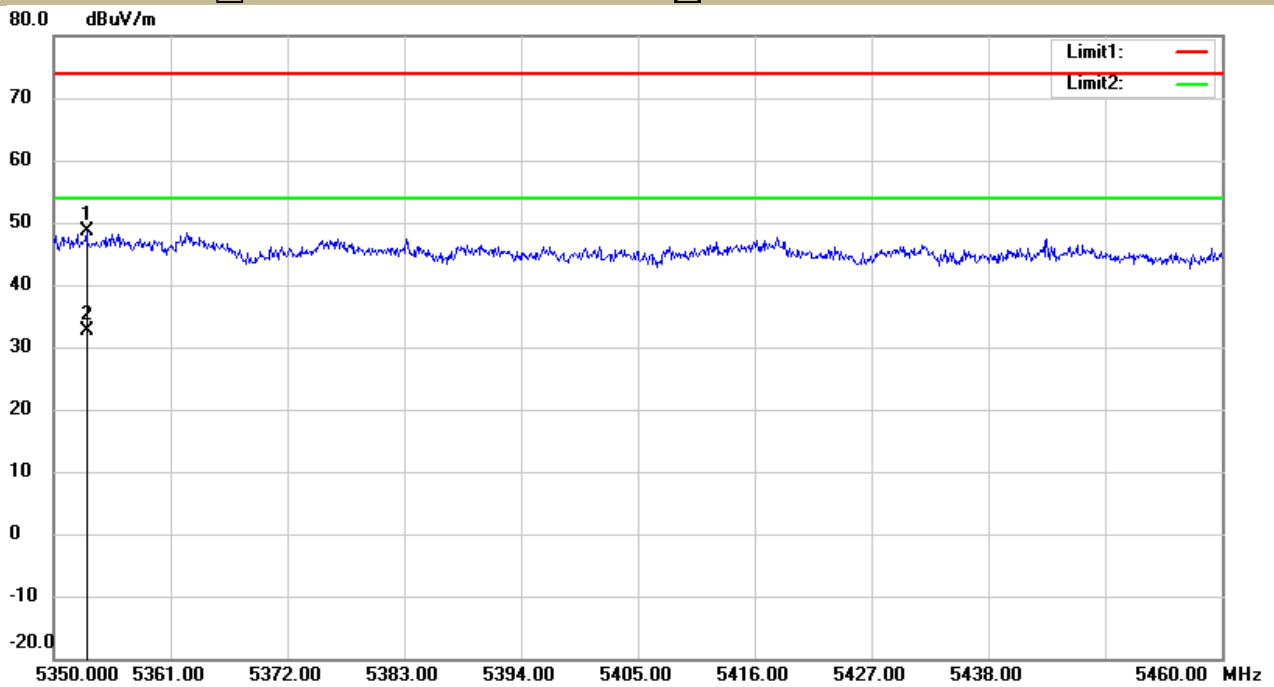


**UNII Band I**

Test Model Undesirable radiated Spurious Emission in Restricted Band (5350-5460MHz )

802.11n(HT40)       802.11ac (VHT40)

5190       5230      Ant. Pol      V



Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency(MHz):	5210
Test mode:	802.11ac VHT80	Mode:	MIMO

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5114.90	H	48.17	-47.06	-27.00	Pass
5117.50	V	47.42	-47.81	-27.00	Pass

Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
5114.90	H	48.17	32.48	74.00	54.00	-25.83	-21.52
5117.50	V	47.42	31.67	74.00	54.00	-26.58	-22.33

Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency(MHz):	5210
Test mode:	802.11ac VHT80	Mode:	MIMO

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5360.56	H	48.28	-46.95	-27.00	Pass
5353.08	V	49.60	-45.63	-27.00	Pass

Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
5360.56	H	48.28	33.37	74.00	54.00	-25.72	-20.63
5353.08	V	49.60	32.47	74.00	54.00	-24.40	-21.53

- Note:** (1) All Readings are Peak Value (VBW=300kHz)  
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
 (3)  $EIRP[dBm] = E[dB\mu V/m] + 20 \log(d[meters]) - 104.77$   
 d is the measurement distance in 3 meters

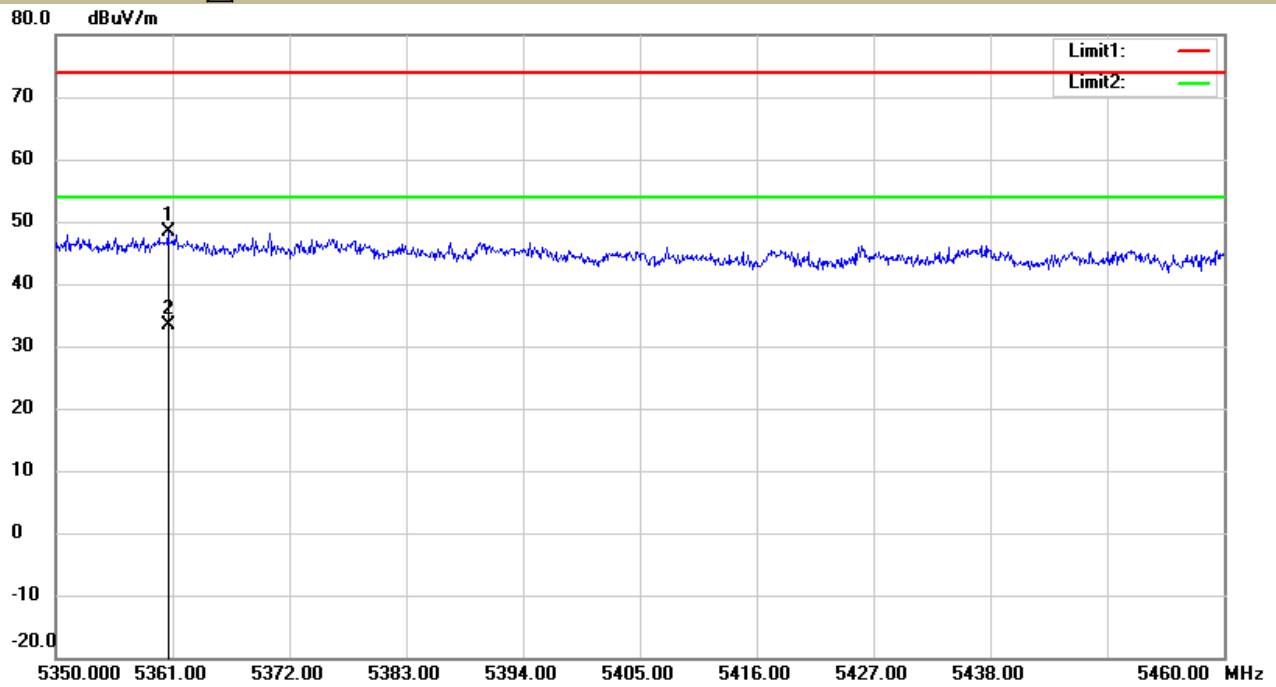




**UNII Band I**

Test Model    Undesirable radiated Spurious Emission in Restricted Band (5350-5460MHz )  
802.11n(VHT80)  
5210

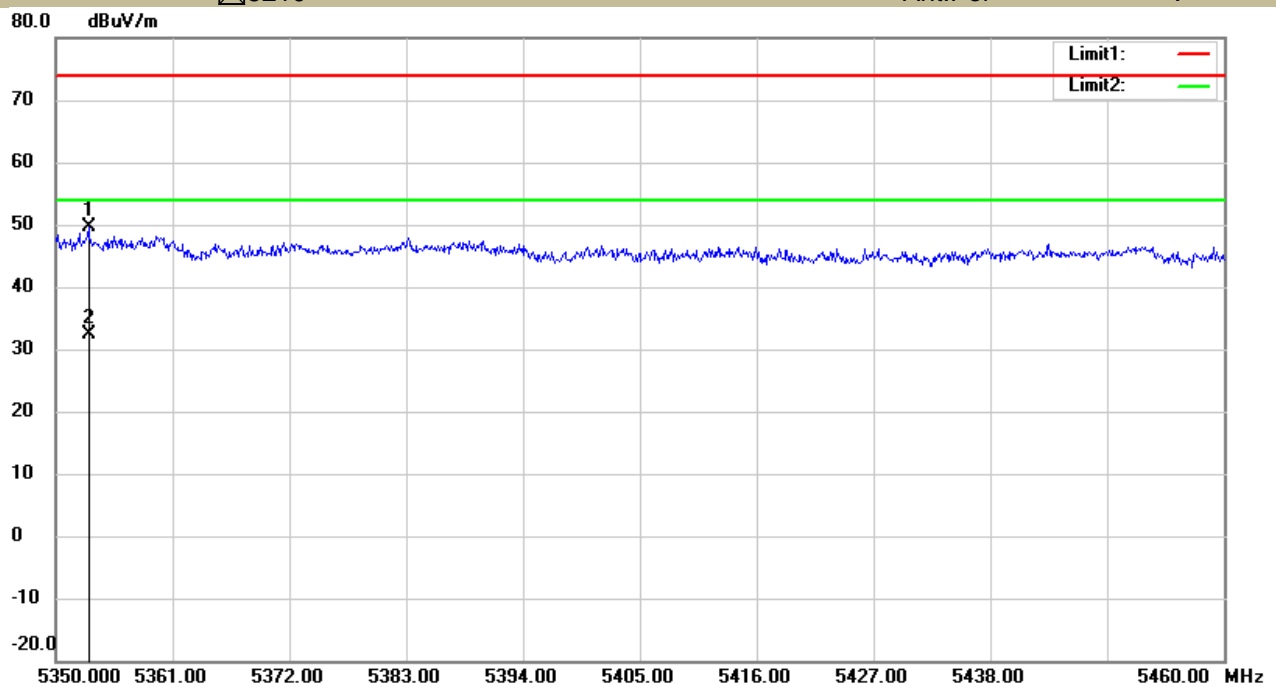
Ant.Pol                    H



**UNII Band I**

Test Model    Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz )  
802.11n(VHT80)  
5210

Ant.Pol                    V



- For Undesirable radiated Spurious Emission in UNII Band III
- Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)  
The 802.11a/n/ac siso and mimo mode s have been tested and the worst case mode recorded as below:

Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency(MHz):	5745
Test mode:	802.11a	Antenna	0

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
1875.16	V	39.46	-55.77	-27.00	-28.77
12618.74	V	53.39	-41.84	-27.00	-14.84
17081.30	V	55.08	-40.15	-27.00	-13.15
1880.17	H	38.24	-56.99	-27.00	-29.99
13977.05	H	53.18	-42.05	-27.00	-15.05
18912.43	H	54.30	-40.93	-27.00	-13.93

Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
1875.16	V	39.46	31.23	74.00	54.00	-34.54	-22.77
12618.74	V	53.39	37.96	74.00	54.00	-20.61	-16.04
17081.30	V	55.08	38.99	74.00	54.00	-18.92	-15.01
1880.17	H	38.24	31.20	74.00	54.00	-35.76	-22.80
13977.05	H	53.18	37.52	74.00	54.00	-20.82	-16.48
18912.43	H	54.30	39.23	74.00	54.00	-19.70	-14.77

Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency(MHz):	5785
Test mode:	802.11a	Antenna	0

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
1908.28	V	39.22	-56.01	-27.00	-29.01
13642.26	V	53.15	-42.07	-27.00	-15.07
18205.66	V	54.58	-40.64	-27.00	-13.64
1903.17	H	38.29	-56.94	-27.00	-29.94
14179.09	H	53.47	-41.75	-27.00	-14.75
18415.94	H	53.93	-41.30	-27.00	-14.30

Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
1908.28	V	39.22	31.02	74.00	54.00	-34.78	-22.98
13642.26	V	53.15	38.02	74.00	54.00	-20.85	-15.98
18205.66	V	54.58	39.25	74.00	54.00	-19.42	-14.75
1903.17	H	38.29	30.88	74.00	54.00	-35.71	-23.12
14179.09	H	53.47	38.63	74.00	54.00	-20.53	-15.37
18415.94	H	53.93	39.75	74.00	54.00	-20.07	-14.25

Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency(MHz):	5825
Test mode:	802.11a	Antenna	0

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
1884.31	V	39.30	-55.92	-27.00	-28.92
13530.35	V	52.66	-42.57	-27.00	-15.57
18437.72	V	54.48	-40.74	-27.00	-13.74
1868.29	H	38.67	-56.55	-27.00	-29.55
13665.49	H	53.35	-41.88	-27.00	-14.88
17674.16	H	53.81	-41.42	-27.00	-14.42

Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
1884.31	V	39.30	30.99	74.00	54.00	-34.70	-23.01
13530.35	V	52.66	37.82	74.00	54.00	-21.34	-16.18
18437.72	V	54.48	39.88	74.00	54.00	-19.52	-14.12
1868.29	H	38.67	31.04	74.00	54.00	-35.33	-22.96
13665.49	H	53.35	38.23	74.00	54.00	-20.65	-15.77
17674.16	H	53.81	40.12	74.00	54.00	-20.19	-13.88

- Note:** (1) All Readings are Peak Value(VBW=300kHz)  
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
(3)EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77  
d is the measurement distance in 3 meters

Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency(MHz):	5755
Test mode:	802.11n(HT40)	Mode:	MIMO

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
1920.17	V	39.04	-56.19	-27.00	-29.19
12700.72	V	53.12	-42.11	-27.00	-15.11
17157.73	V	54.79	-40.44	-27.00	-13.44
1899.22	H	37.84	-57.39	-27.00	-30.39
14052.53	H	52.97	-42.26	-27.00	-15.26
18982.91	H	54.17	-41.06	-27.00	-14.06

Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
1920.17	V	39.04	29.04	74.00	54.00	-34.96	-24.96
12700.72	V	53.12	37.95	74.00	54.00	-20.88	-16.05
17157.73	V	54.79	38.96	74.00	54.00	-19.21	-15.04
1899.22	H	37.84	29.06	74.00	54.00	-36.16	-24.94
14052.53	H	52.97	37.36	74.00	54.00	-21.03	-16.64
18982.91	H	54.17	39.12	74.00	54.00	-19.83	-14.88

Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency(MHz):	5795
Test mode:	802.11n(HT40)	Mode:	MIMO

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
1941.42	V	39.01	-56.22	-27.00	-29.22
13679.10	V	52.83	-42.40	-27.00	-15.40
18287.75	V	54.55	-40.67	-27.00	-13.67
1963.01	H	38.15	-57.08	-27.00	-30.08
14243.86	H	53.04	-42.19	-27.00	-15.19
18422.84	H	53.70	-41.52	-27.00	-14.52

Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
1941.42	V	39.01	29.98	74.00	54.00	-34.99	-24.02
13679.10	V	52.83	38.01	74.00	54.00	-21.17	-15.99
18287.75	V	54.55	39.11	74.00	54.00	-19.45	-14.89
1963.01	H	38.15	30.02	74.00	54.00	-35.85	-23.98
14243.86	H	53.04	38.51	74.00	54.00	-20.96	-15.49
18422.84	H	53.70	39.72	74.00	54.00	-20.30	-14.28

**Note:** (1) All Readings are Peak Value(VBW=300kHz)  
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
(3)EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77  
d is the measurement distance in 3 meters

Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency(MHz):	5775
Test mode:	802.11ac(VHT80)	Mode:	MIMO

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
1947.28	V	39.25	-55.98	-27.00	-28.98
13552.49	V	52.53	-42.70	-27.00	-15.70
18446.11	V	54.44	-40.79	-27.00	-13.79
1957.62	H	38.62	-56.61	-27.00	-29.61
13714.80	H	53.00	-42.22	-27.00	-15.22
17756.85	H	53.52	-41.71	-27.00	-14.71

Freq. (MHz)	Ant.Pol. H/V	Emission Level(dBuV/m)		Limit 3m(dBuV/m)		Over(dB)	
		PK	AV	PK	AV	PK	AV
1947.28	V	39.25	30.05	74.00	54.00	-34.75	-23.95
13552.49	V	52.53	37.72	74.00	54.00	-21.47	-16.28
18446.11	V	54.44	39.86	74.00	54.00	-19.56	-14.14
1957.62	H	38.62	30.02	74.00	54.00	-35.38	-23.98
13714.80	H	53.00	38.23	74.00	54.00	-21.00	-15.77
17756.85	H	53.52	39.94	74.00	54.00	-20.48	-14.06

- Note:** (1) All Readings are Peak Value(VBW=300kHz)  
(2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
(3)EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77  
d is the measurement distance in 3 meters

- Undesirable radiated Spurious Emission in band edge

The 802.11a/n/ac siso and mimo modes has been tested and the worst case mode recorded as below:

Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency:	5745
Test mode:	802.11a	Mode:	SISO antenna 0

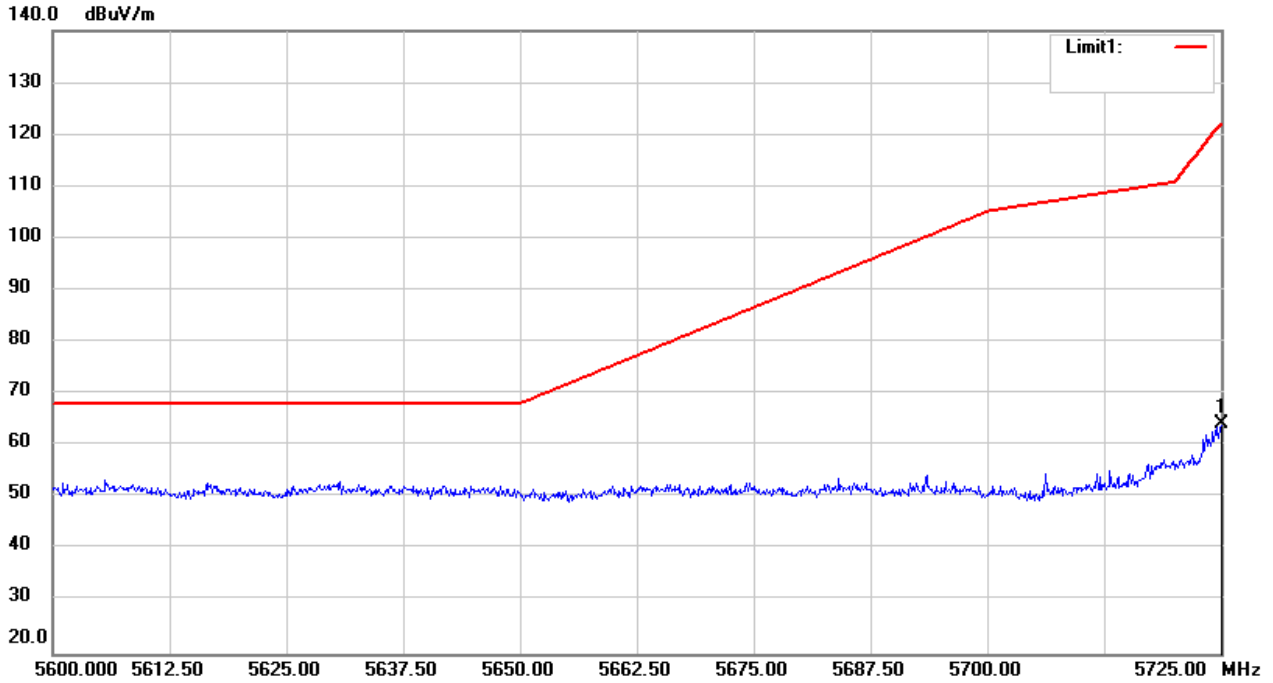
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5725.00	H	64.37	-30.86	27.00	PASS
5724.88	V	49.60	-45.63	26.73	PASS

Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency:	5825
Test mode:	802.11a	Mode:	SISO antenna 0

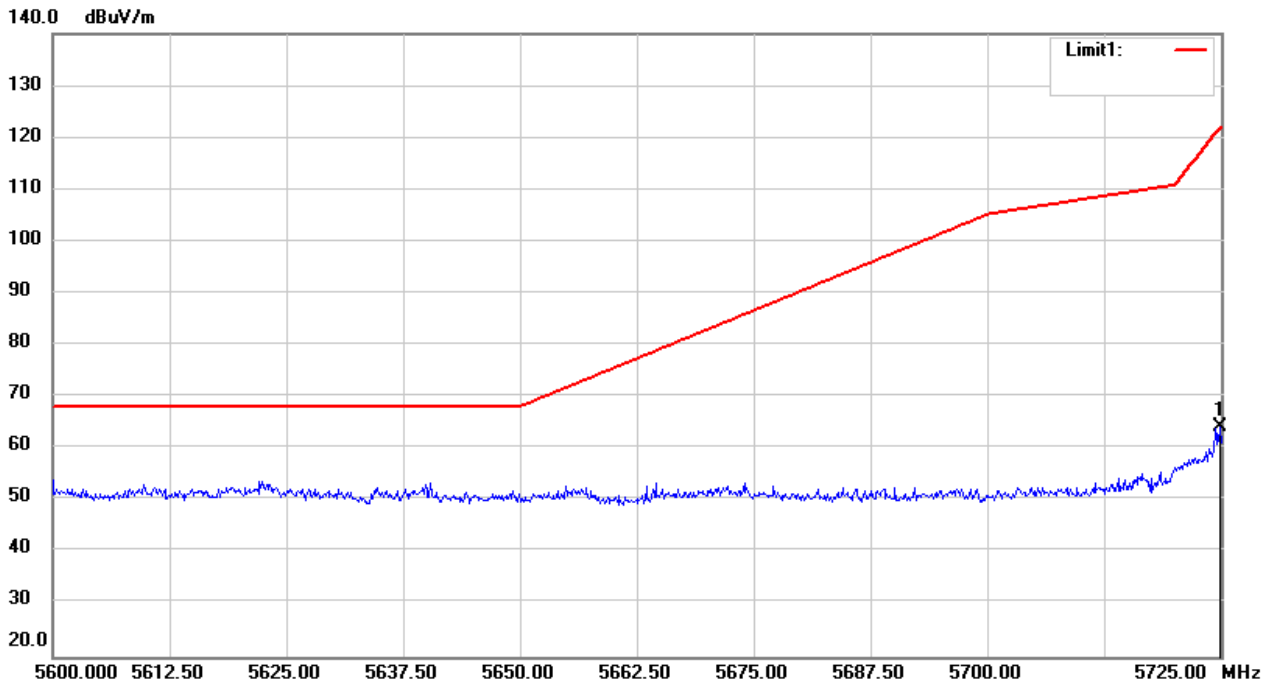
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5850.00	H	64.22	-31.01	27.0	PASS
5850.00	V	64.14	-31.09	27.0	PASS

- Note:** (1) All Readings are Peak Value (VBW=3MHz)  
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
 (3)  $EIRP[dBm] = E[dB\mu V/m] + 20 \log(d[meters]) - 104.77$   
 d is the measurement distance in 3 meters

UNII Band III				
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge	
	<input checked="" type="checkbox"/> 802.11a	<input type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11ac(HT20)	
		<input checked="" type="checkbox"/> 5745	Ant.Pol	H



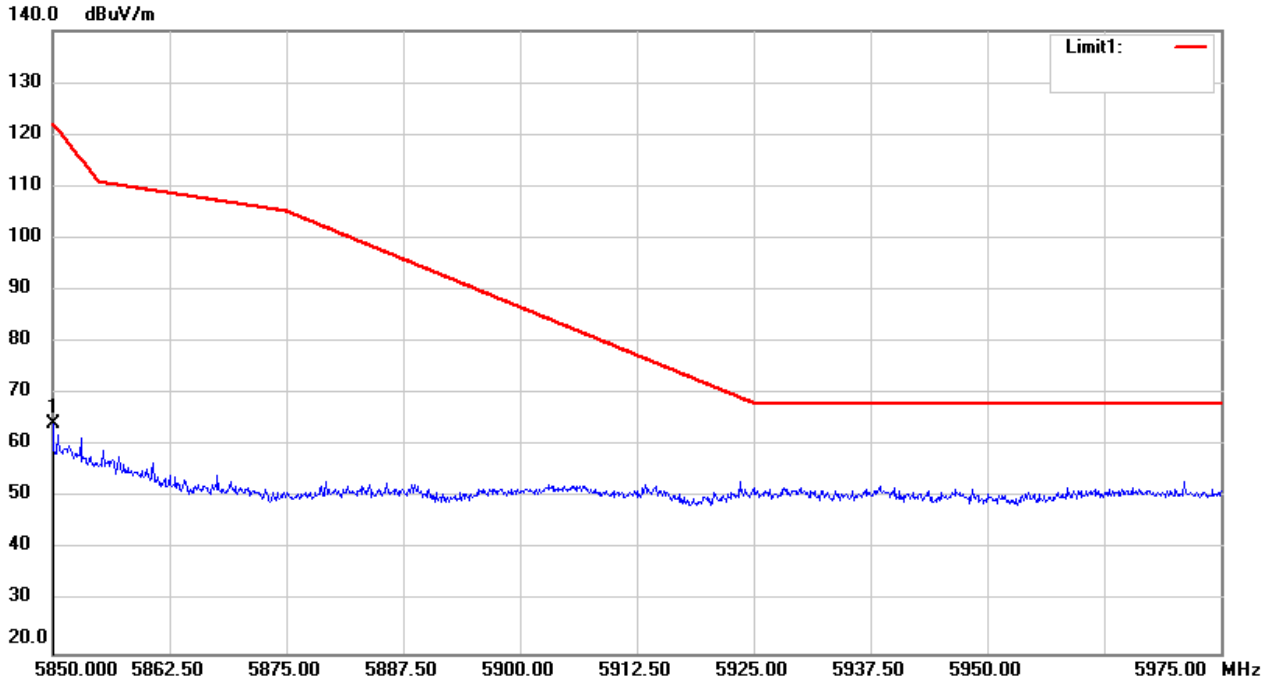
UNII Band III				
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge	
	<input checked="" type="checkbox"/> 802.11a	<input type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11ac(HT20)	
		<input checked="" type="checkbox"/> 5745	Ant.Pol	V





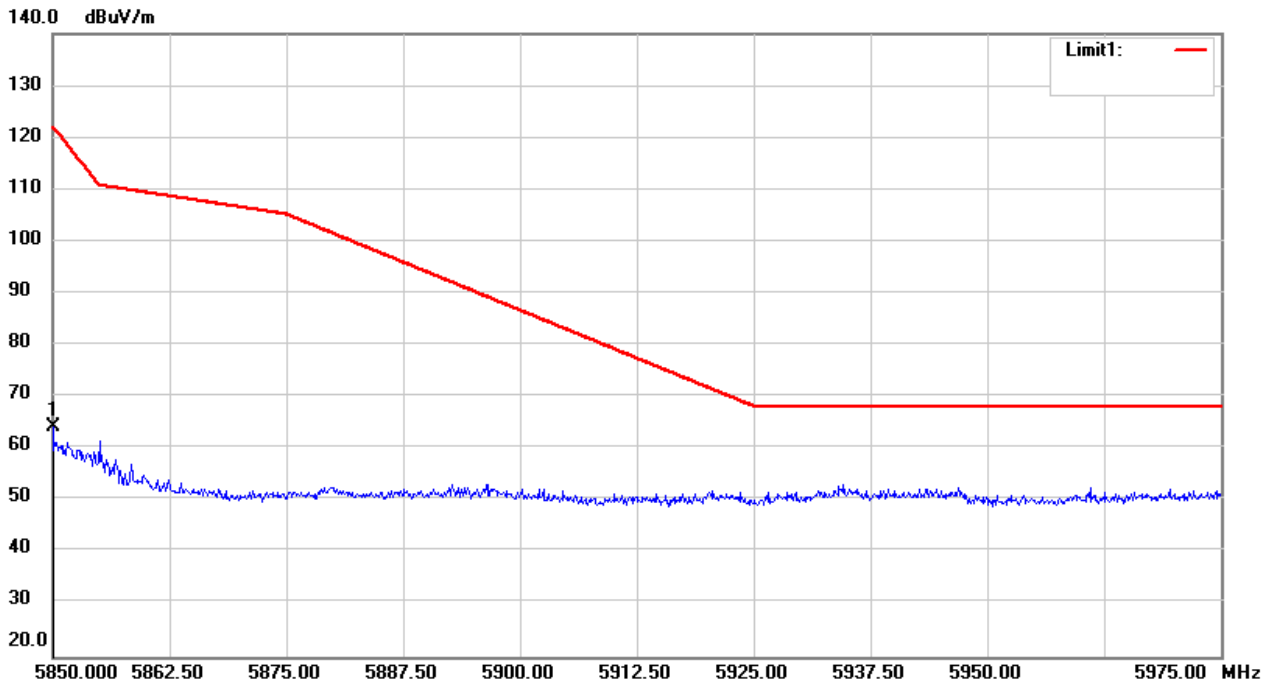
**UNII Band III**

Test Model	Undesirable radiated <input checked="" type="checkbox"/> 802.11a	Undesirable radiated <input checked="" type="checkbox"/> 5825	Spurious Emission in Band Edge <input type="checkbox"/> 802.11n(HT20)		Spurious Emission in Band Edge <input type="checkbox"/> 802.11ac(HT20)
				Ant.Pol	H



**UNII Band III**

Test Model	Undesirable radiated <input checked="" type="checkbox"/> 802.11a	Undesirable radiated <input checked="" type="checkbox"/> 5825	Spurious Emission in Band Edge <input type="checkbox"/> 802.11n(HT20)		Spurious Emission in Band Edge <input type="checkbox"/> 802.11ac(HT20)
				Ant.Pol	V



Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency:	5755
Test mode:	802.11n(HT40)	Mode:	MIMO

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5725.00	H	63.53	-30.86	27.00	PASS
5724.88	V	62.06	-45.63	26.73	PASS

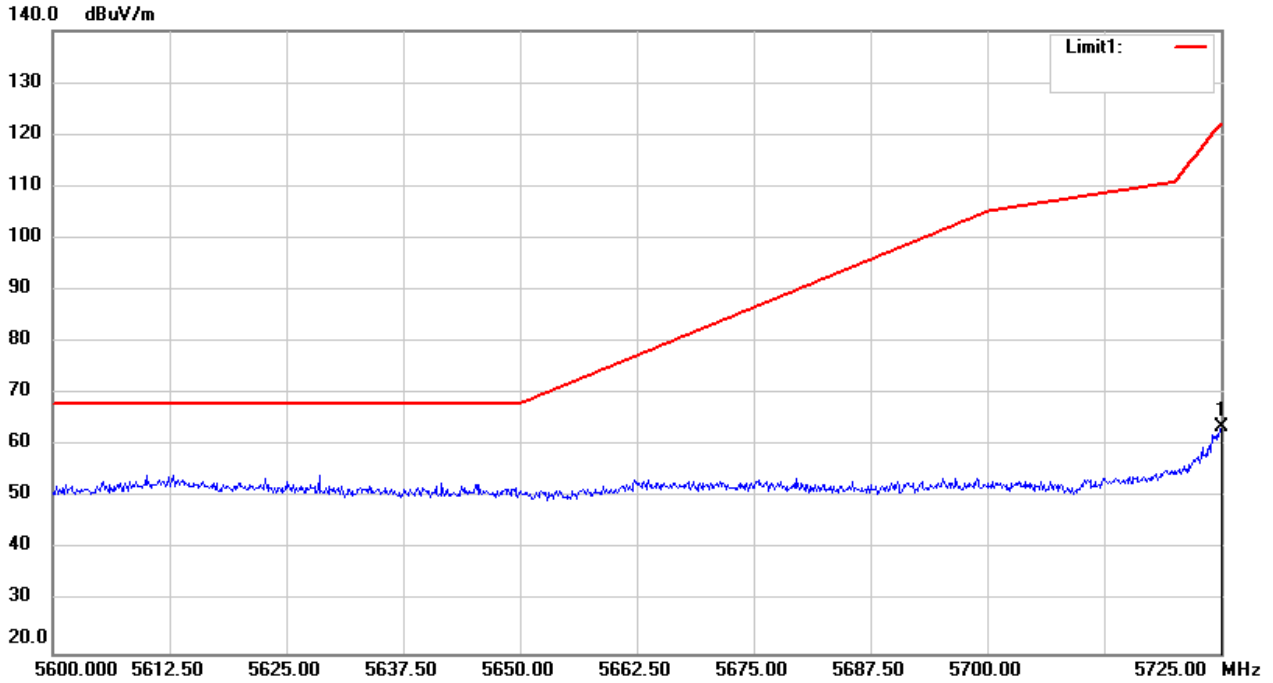
Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency:	5795
Test mode:	802.11n(HT40)	Mode:	MIMO

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5850.88	H	60.03	-35.20	24.99	PASS
5850.50	V	58.92	-36.31	27.00	PASS

- Note:** (1) All Readings are Peak Value (VBW=3MHz)  
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
 (3)  $EIRP[dBm] = E[dBuV/m] + 20 \log(d[meters]) - 104.77$   
 d is the measurement distance in 3 meters

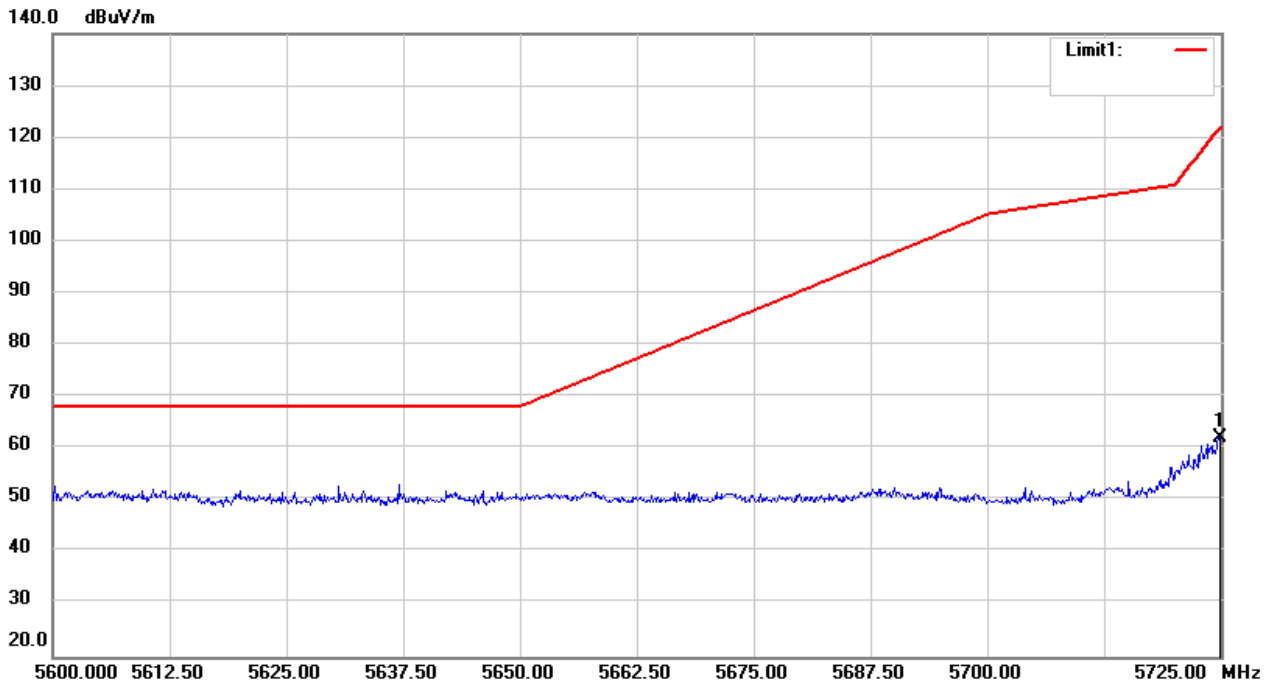
UNII Band III

Test Model	Undesirable radiated <input checked="" type="checkbox"/> 802.11n(HT40)	Undesirable radiated <input type="checkbox"/> 802.11ac(VHT40)	Spurious Emission in Band Edge
	<input checked="" type="checkbox"/> 5755		Ant.Pol      H



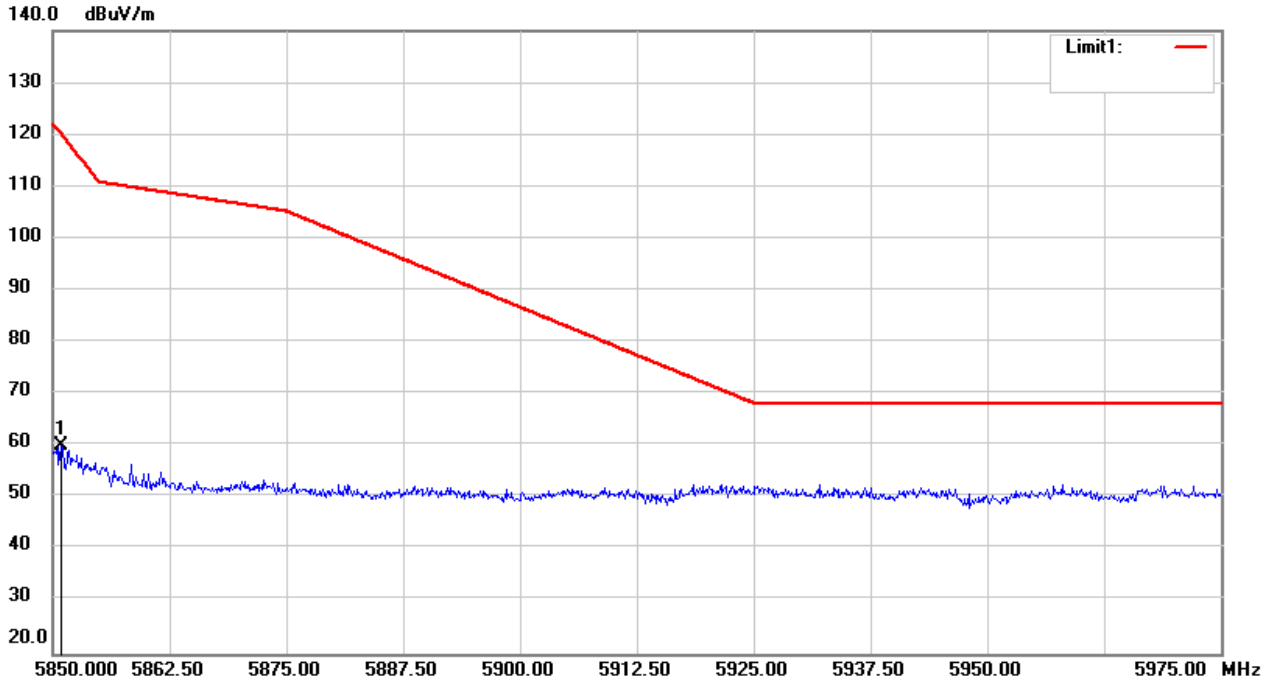
UNII Band III

Test Model	Undesirable radiated <input checked="" type="checkbox"/> 802.11n(HT40)	Undesirable radiated <input type="checkbox"/> 802.11ac(VHT40)	Spurious Emission in Band Edge
	<input checked="" type="checkbox"/> 5755		Ant.Pol      V



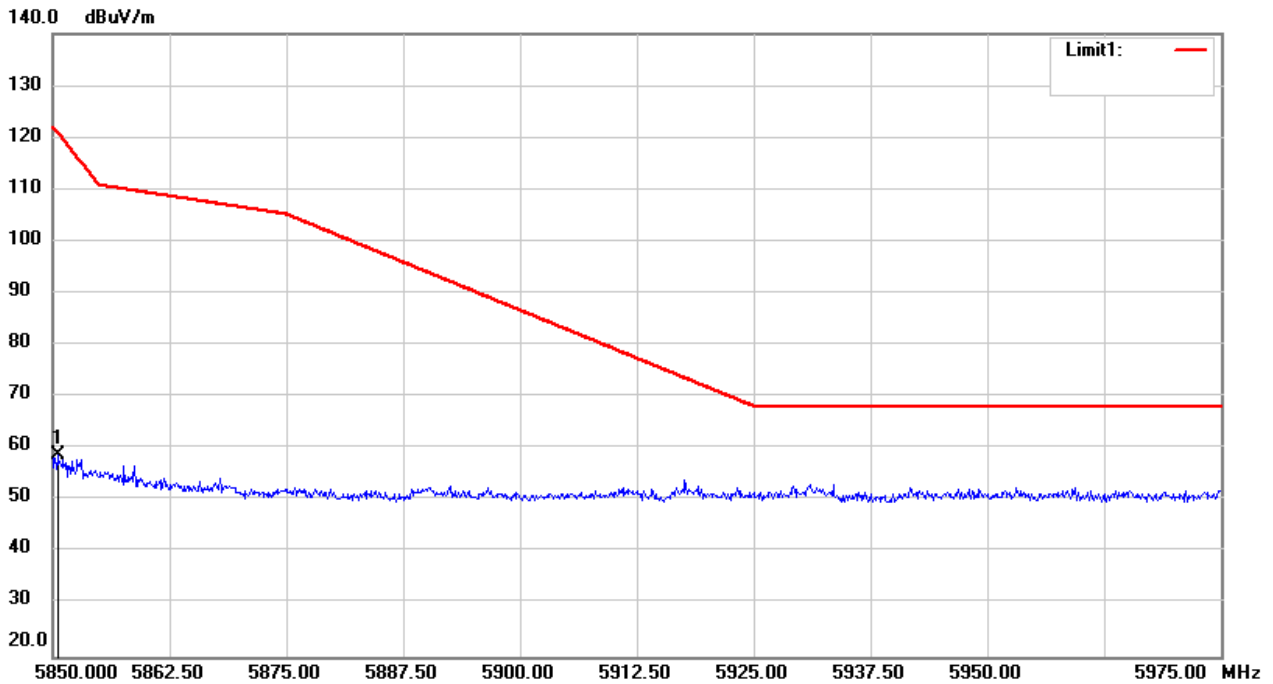
UNII Band III

Test Model	Undesirable radiated <input checked="" type="checkbox"/> 802.11n(HT40)	Undesirable radiated <input type="checkbox"/> 802.11ac(VHT40)	Spurious Emission in Band Edge
	<input checked="" type="checkbox"/> 5795		Ant.Pol      H



UNII Band III

Test Model	Undesirable radiated <input checked="" type="checkbox"/> 802.11n(HT40)	Undesirable radiated <input type="checkbox"/> 802.11ac(VHT40)	Spurious Emission in Band Edge
	<input checked="" type="checkbox"/> 5795		Ant.Pol      V



Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency:	5775
Test mode:	802.11n(VHT80)	Mode:	MIMO

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5724.63	H	58.29	-36.94	26.16	PASS
5723.25	V	59.98	-35.25	23.01	PASS

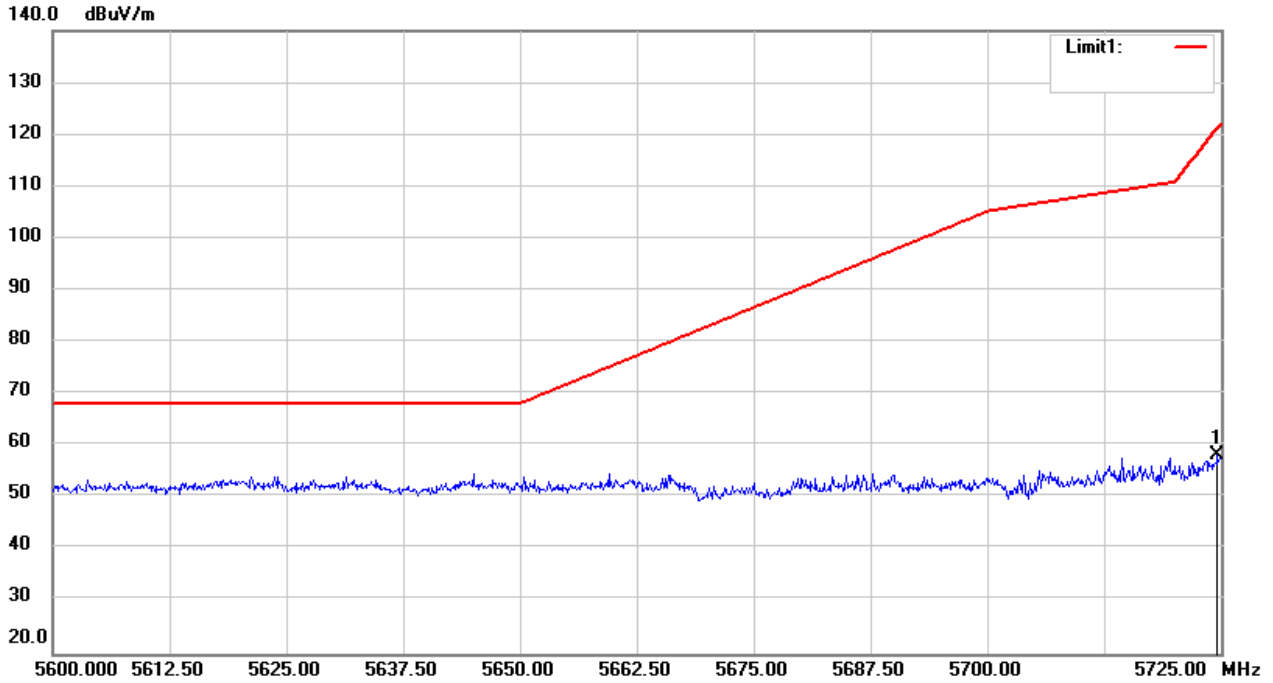
Temperature :	28°C	Test By:	King Kong
Humidity :	65 %	Frequency:	5775
Test mode:	802.11n(VHT80)	Mode:	MIMO

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5850.25	H	63.50	-31.73	26.43	PASS
5850.13	V	59.74	-35.49	26.70	PASS

- Note:** (1) All Readings are Peak Value (VBW=3MHz)  
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
 (3)  $EIRP[dBm] = E[dBuV/m] + 20 \log(d[meters]) - 104.77$   
 d is the measurement distance in 3 meters

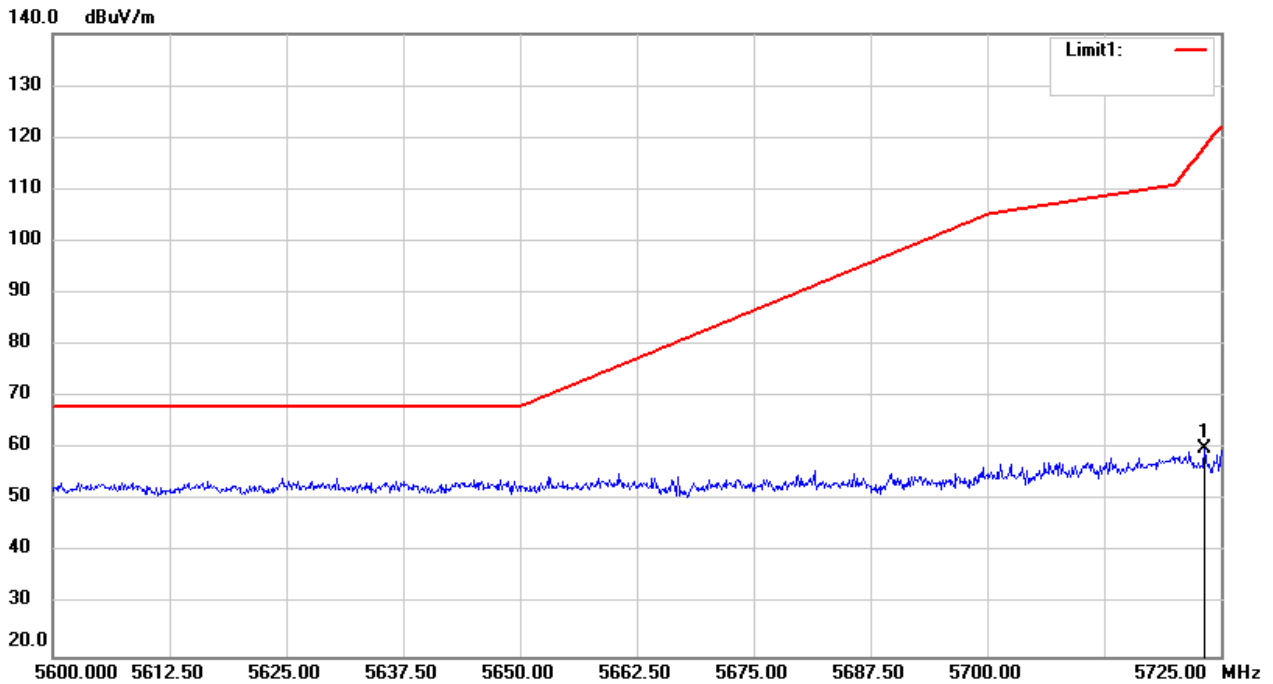
UNII Band III

Test Model	Undesirable radiated <input checked="" type="checkbox"/> 802.11n(VHT80)	Undesirable radiated <input checked="" type="checkbox"/> 5775	Spurious Emission in Band Edge
			Ant. Pol: H



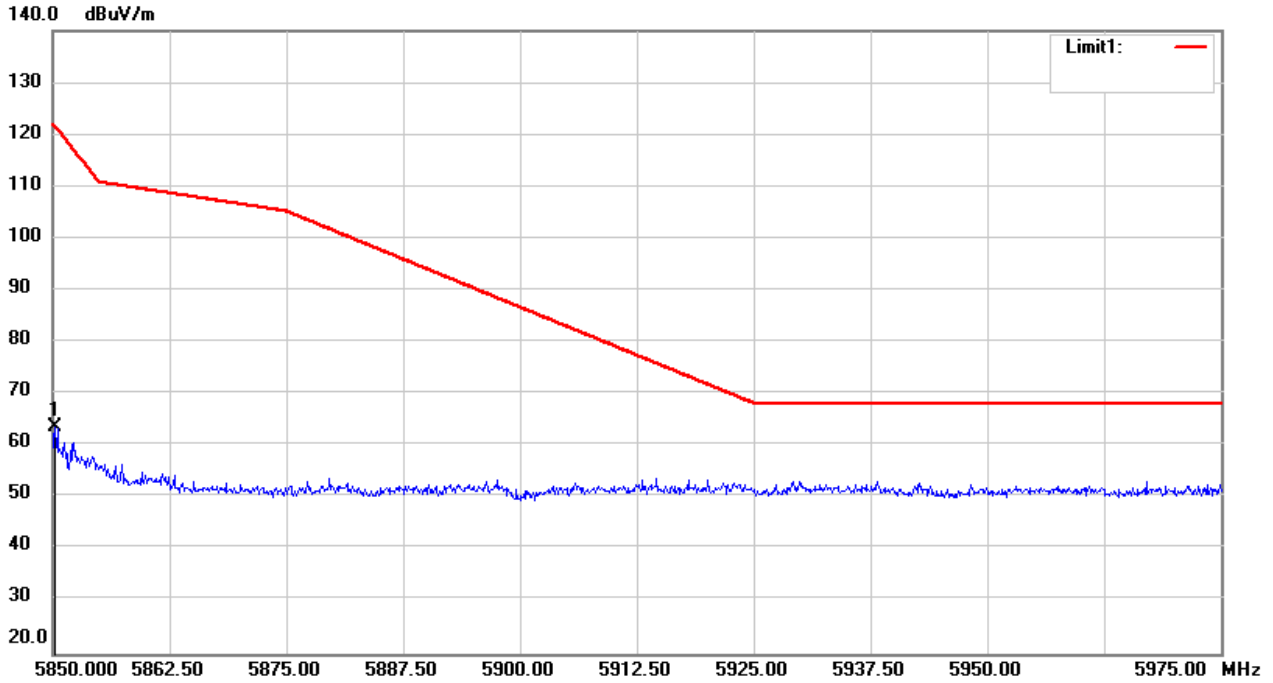
UNII Band III

Test Model	Undesirable radiated <input checked="" type="checkbox"/> 802.11n(VHT80)	Undesirable radiated <input checked="" type="checkbox"/> 5775	Spurious Emission in Band Edge
			Ant. Pol: V



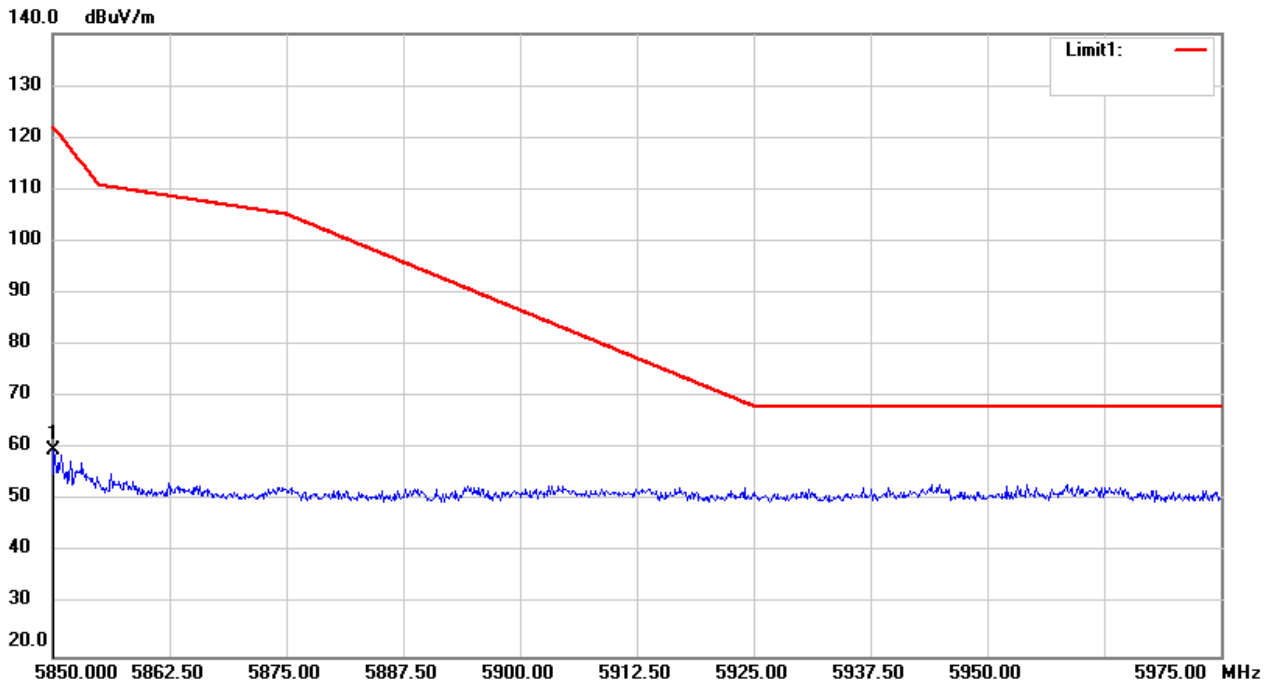
UNII Band III

Test Model	Undesirable radiated Undesirable radiated Spurious Emission in Band Edge		
	☒802.11n(VHT80)	☒5775	Ant.Pol H

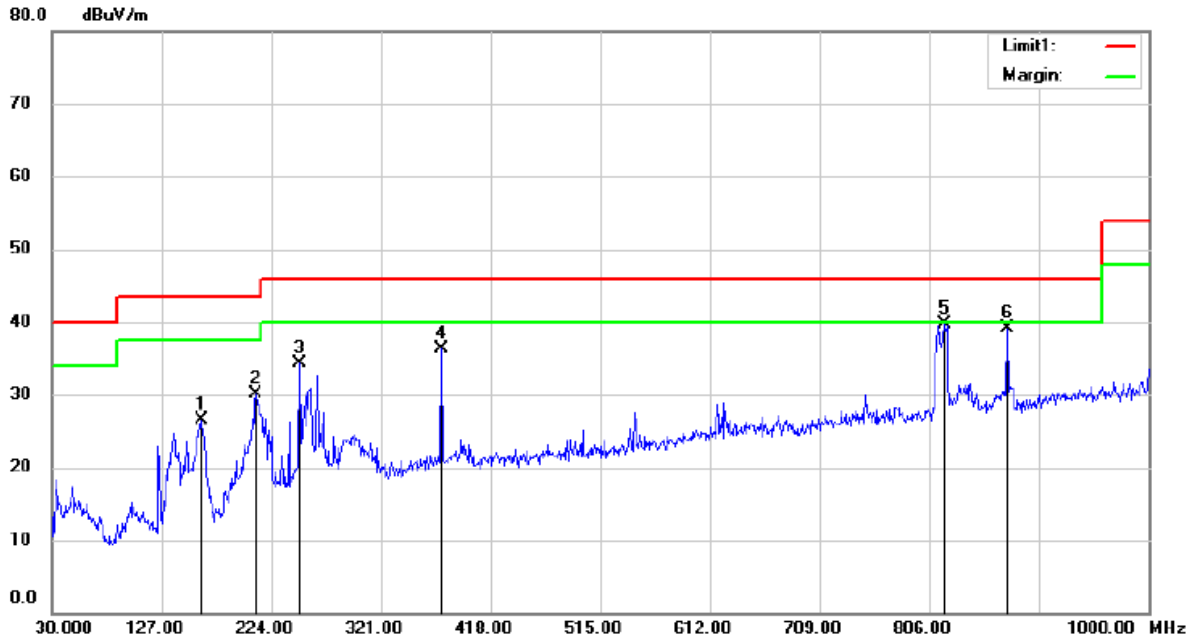


UNII Band III

Test Model	Undesirable radiated Undesirable radiated Spurious Emission in Band Edge		
	☒802.11n(VHT80)	☒5775	Ant.Pol V



- Undesirable radiated Spurious Emission below 1GHz (30MHz to 1GHz)  
All modes have been tested, and the worst results (802.11a siso mode antenna 0) have been recorded in the report.



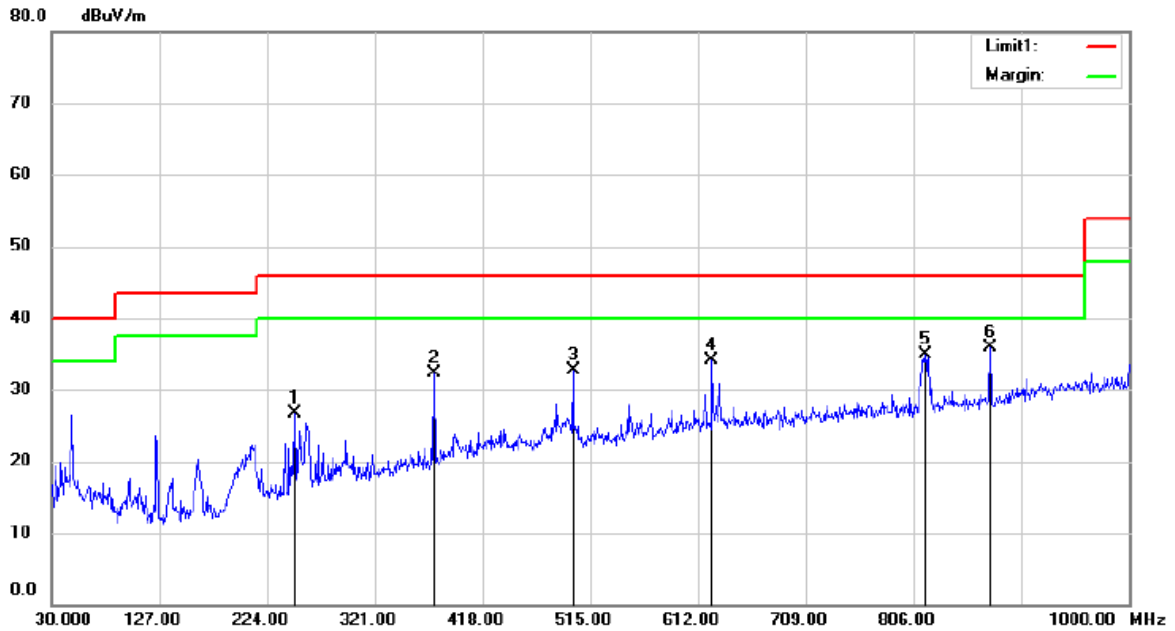
Site 3m Chamber 1# Polarization: **Horizontal** Temperature: 27 C  
 Limit: (RE)FCC PART 15C Power: AC 120V/60Hz Humidity: 43 %  
 Mode: 802.11 a 5180MHz  
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Comment
1		162.1624	41.15	-14.57	26.58	43.50	-16.92			peak
2		210.7837	41.80	-11.74	30.06	43.50	-13.44			peak
3		249.9474	44.23	-9.89	34.34	46.00	-11.66			peak
4		374.9562	43.07	-6.70	36.37	46.00	-9.63			peak
5	*	819.9437	39.23	0.44	39.67	46.00	-6.33			peak
6		875.1124	37.56	1.55	39.11	46.00	-6.89			peak

\*:Maximum data x:Over limit !:over margin

Operator: XZC





Site 3m Chamber 1# Polarization: **Vertical** Temperature: 27 C  
 Limit: (RE)FCC PART 15C Power: AC 120V/60Hz Humidity: 43 %

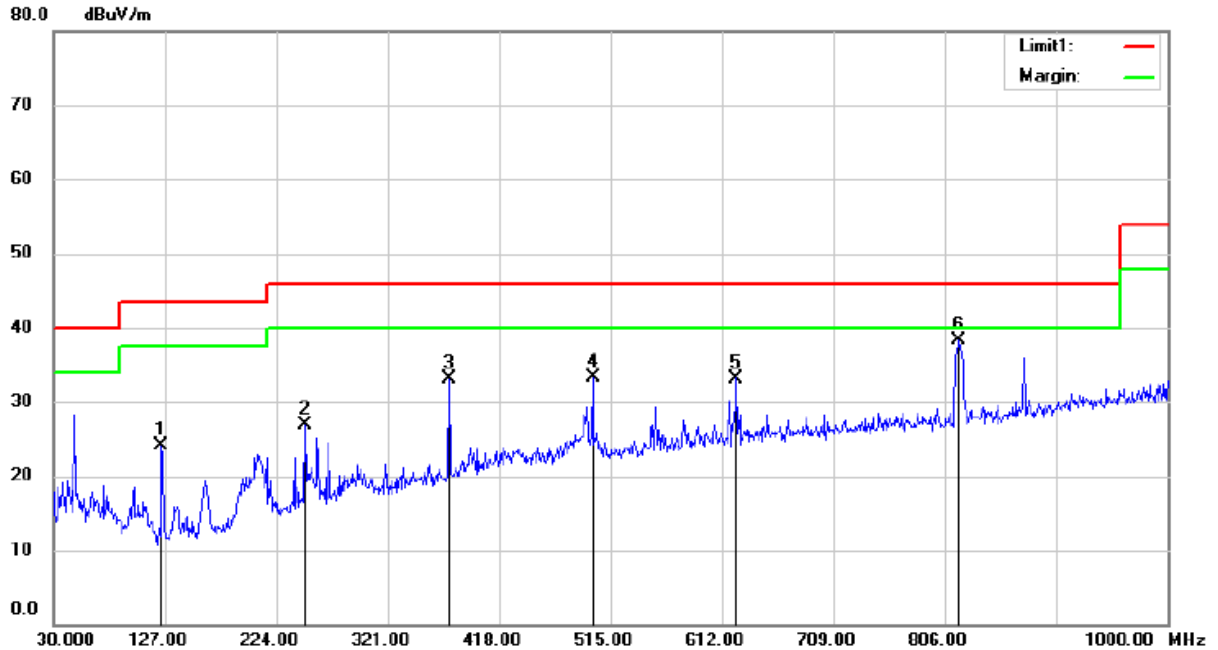
Mode: 802.11 a 5180MHz  
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree degree	Comment
1		249.9474	36.64	-9.89	26.75	46.00	-19.25	peak		
2		374.9562	39.09	-6.70	32.39	46.00	-13.61	peak		
3		499.9650	37.44	-4.74	32.70	46.00	-13.30	peak		
4		624.9737	35.91	-1.89	34.02	46.00	-11.98	peak		
5		816.7912	34.40	0.43	34.83	46.00	-11.17	peak		
6	*	875.1124	34.33	1.55	35.88	46.00	-10.12	peak		

\*:Maximum data x:Over limit !:over margin

Operator: XZC



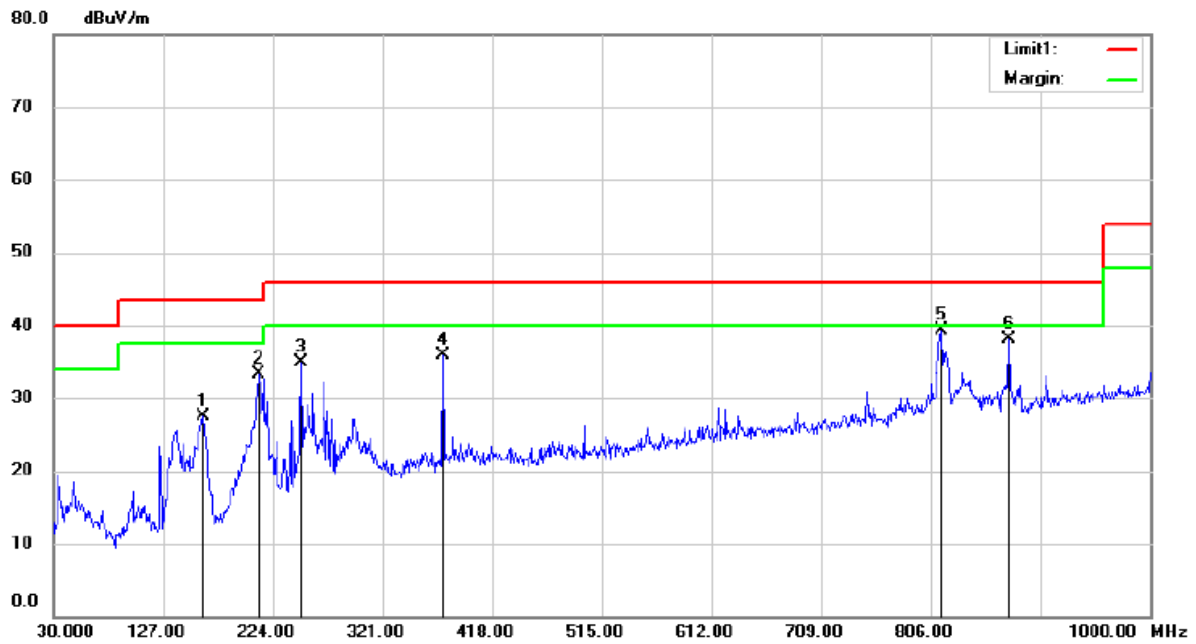


Site 3m Chamber 1# Polarization: *Vertical* Temperature: 27 C  
 Limit: (RE)FCC PART 15C Power: AC 120V/60Hz Humidity: 43 %  
 Mode:802.11 a 5200MHz  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		124.9387	39.12	-14.98	24.14	43.50	-19.36			peak
2		249.9474	36.82	-9.89	26.93	46.00	-19.07			peak
3		374.9562	39.86	-6.70	33.16	46.00	-12.84			peak
4		499.9650	37.98	-4.74	33.24	46.00	-12.76			peak
5		624.9737	35.09	-1.89	33.20	46.00	-12.80			peak
6	*	819.0950	37.83	0.44	38.27	46.00	-7.73			peak

\*:Maximum data x:Over limit !:over margin

Operator: XZC

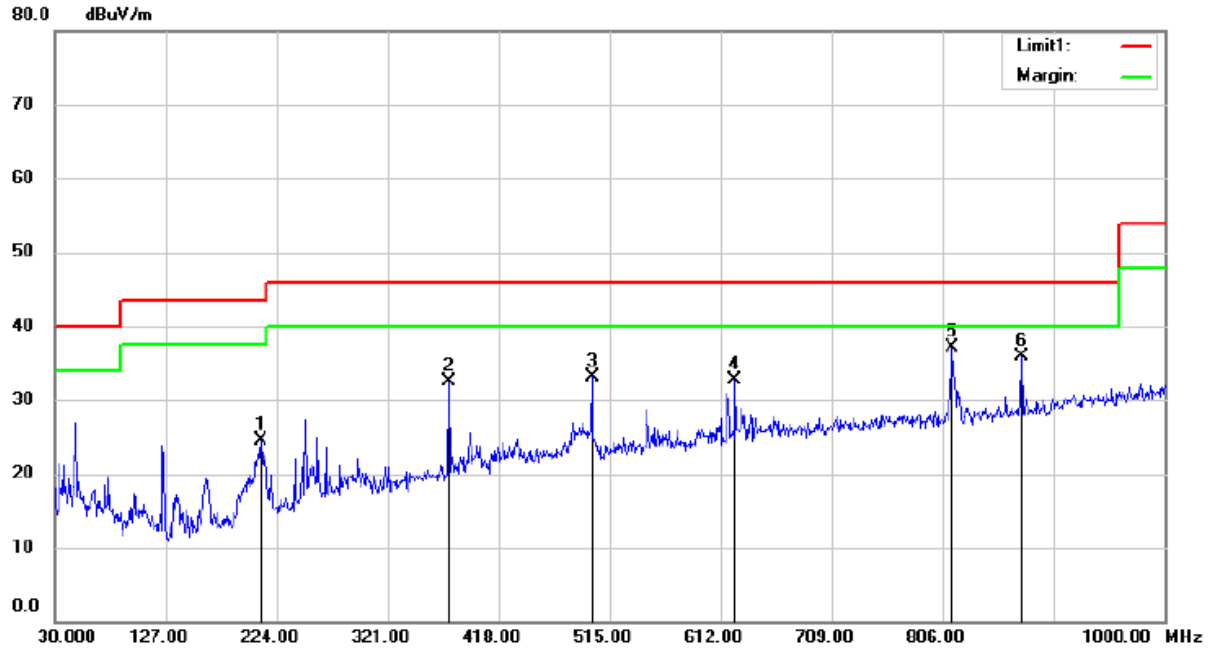


Site 3m Chamber 1#      Polarization: *Horizontal*      Temperature: 27 C  
 Limit: (RE)FCC PART 15C      Power: AC 120V/60Hz      Humidity: 43 %  
 Mode:802.11 a 5240MHz  
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Detector	Comment
1		162.1624	42.16	-14.57	27.59	43.50	-15.91			peak	
2		211.5112	44.94	-11.70	33.24	43.50	-10.26			peak	
3		249.9474	44.78	-9.89	34.89	46.00	-11.11			peak	
4		374.9562	42.61	-6.70	35.91	46.00	-10.09			peak	
5	*	815.8212	38.79	0.43	39.22	46.00	-6.78			peak	
6		875.1124	36.51	1.55	38.06	46.00	-7.94			peak	

\*:Maximum data    x:Over limit    !:over margin

Operator: XZC



Site 3m Chamber 1# Polarization: *Vertical* Temperature: 27 C  
 Limit: (RE)FCC PART 15C Power: AC 120V/60Hz Humidity: 43 %  
 Mode: 802.11 a 5240MHz  
 Note:

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV/m	Limit dBuV/m	Over dB	Antenna Height cm	Table Degree	Comment
1		210.4200	36.30	-11.75	24.55	43.50	-18.95	peak		
2		374.9562	39.17	-6.70	32.47	46.00	-13.53	peak		
3		499.9650	37.94	-4.74	33.20	46.00	-12.80	peak		
4		624.9737	34.67	-1.89	32.78	46.00	-13.22	peak		
5	*	815.3362	36.65	0.43	37.08	46.00	-8.92	peak		
6		875.1124	34.31	1.55	35.86	46.00	-10.14	peak		

\*:Maximum data    x:Over limit    !:over margin

Operator: XZC

## 8.6 POWER LINE CONDUCTED EMISSIONS

### 8.6.1 Applicable Standard

According to FCC Part 15.207(a)

### 8.6.2 Conformance Limit

Frequency(MHz)	Conducted Emission Limit	
	Quasi-peak	Average
0.15-0.5	66-56	56-46
0.5-5.0	56	46
5.0-30.0	60	50

Note: 1. The lower limit shall apply at the transition frequencies

2. The limit decreases in line with the logarithm of the frequency in the range of 0.15 to 0.50MHz.

### 8.6.3 Test Configuration

Test according to clause 6.3 conducted emission test setup

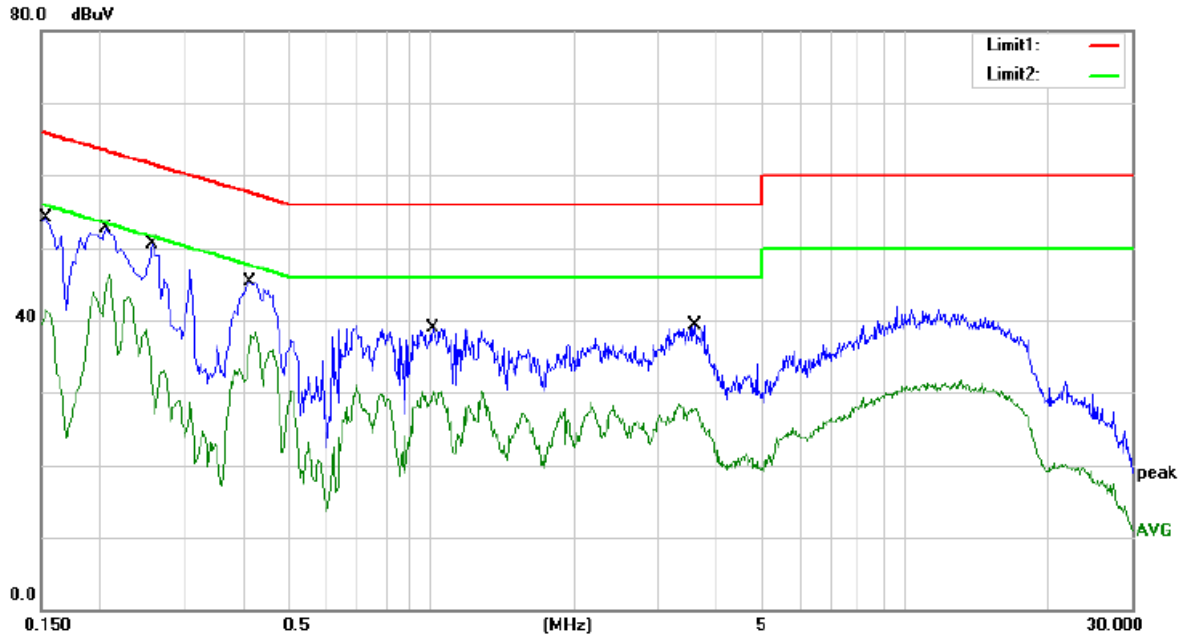
### 8.6.4 Test Procedure

The EUT was placed on a table which is 0.8m above ground plane.  
Maximum procedure was performed on the highest emissions to ensure EUT compliance.  
Repeat above procedures until all frequency measured were complete.

### 8.6.5 Test Results

Pass

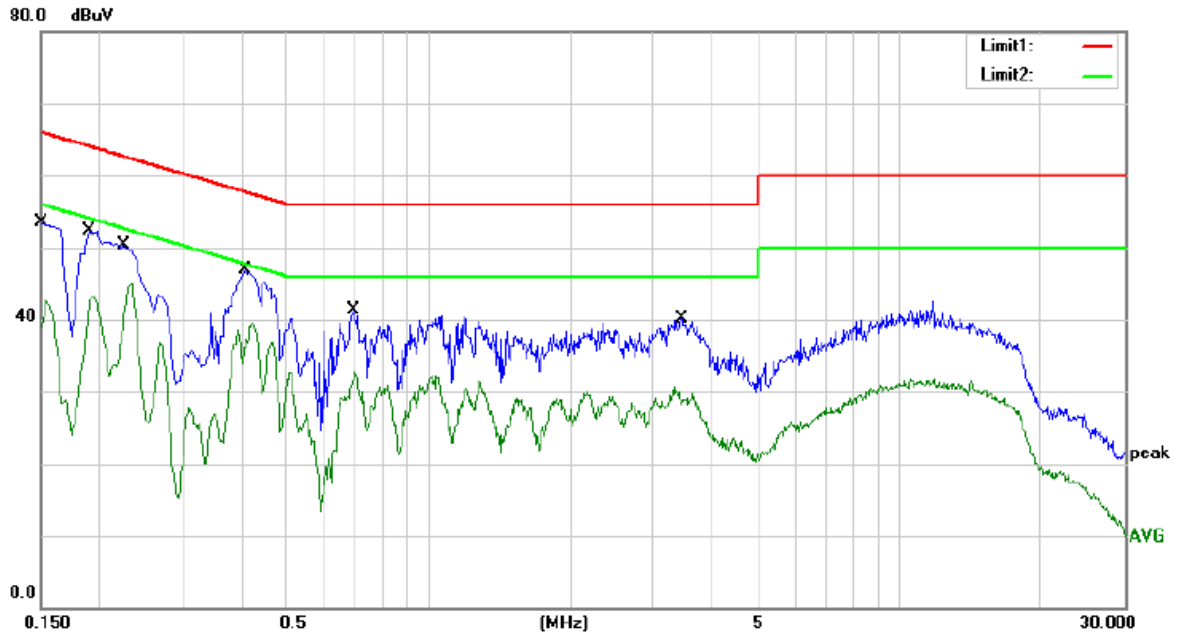
All mode and the voltage 120V and 240V have been tested, and show the worst (802.11a siso mode antenna 0) result as bellow.



Site Conduction #1 Phase: *N* Temperature: 24.9  
 Limit: (CE)FCC PART 15 class B\_QP Power: AC 120V/60Hz Humidity: 54 %  
 Mode: 802.11 a 5180MHz  
 Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over		
		MHz	Level	Factor	ment			Detector	Comment
			dBuV	dB	dBuV	dBuV	dB		
1		0.1540	44.40	9.65	54.05	65.78	-11.73	QP	
2		0.1540	31.78	9.65	41.43	55.78	-14.35	AVG	
3		0.2060	43.07	9.55	52.62	63.37	-10.75	QP	
4	*	0.2060	36.71	9.55	46.26	53.37	-7.11	AVG	
5		0.2580	40.92	9.55	50.47	61.50	-11.03	QP	
6		0.2580	33.83	9.55	43.38	51.50	-8.12	AVG	
7		0.4140	35.76	9.57	45.33	57.57	-12.24	QP	
8		0.4140	28.65	9.57	38.22	47.57	-9.35	AVG	
9		1.0100	29.27	9.59	38.86	56.00	-17.14	QP	
10		1.0100	20.53	9.59	30.12	46.00	-15.88	AVG	
11		3.6020	29.64	9.63	39.27	56.00	-16.73	QP	
12		3.6020	18.92	9.63	28.55	46.00	-17.45	AVG	

!:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: gkm



Site Conduction #1 Phase: **L1** Temperature: 24.9  
 Limit: (CE)FCC PART 15 class B\_QP Power: AC 120V/60Hz Humidity: 54 %  
 Mode: 802.11 a 5180MHz  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1500	43.77	9.67	53.44	66.00	-12.56	QP	
2		0.1500	33.03	9.67	42.70	56.00	-13.30	AVG	
3		0.1900	42.71	9.55	52.26	64.04	-11.78	QP	
4		0.1900	33.85	9.55	43.40	54.04	-10.64	AVG	
5		0.2260	40.65	9.55	50.20	62.60	-12.40	QP	
6	*	0.2260	35.34	9.55	44.89	52.60	-7.71	AVG	
7		0.4100	37.43	9.57	47.00	57.65	-10.65	QP	
8		0.4100	29.84	9.57	39.41	47.65	-8.24	AVG	
9		0.6900	31.71	9.57	41.28	56.00	-14.72	QP	
10		0.6900	23.29	9.57	32.86	46.00	-13.14	AVG	
11		3.4380	30.54	9.63	40.17	56.00	-15.83	QP	
12		3.4380	20.98	9.63	30.61	46.00	-15.39	AVG	

\*:Maximum data x:Over limit !:over margin Comment: Factor build in receiver. Operator: gkm



## 8.7 ANTENNA APPLICATION

### 8.7.1 Antenna Requirement

Standard	Requirement
FCC CRF Part 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. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section. The manufacturer may design the unit so that a broken antenna can be replaced by the user, but the use of a standard antenna jack or electrical connector is prohibited. This requirement does not apply to carrier current devices or to devices operated under the provisions of §15.211, §15.213, §15.217, §15.219, or §15.221. Further, this requirement does not apply to intentional radiators that must be professionally installed, such as perimeter protection systems and some field disturbance sensors, or to other intentional radiators which, in accordance with §15.31(d), must be measured at the installation site. However, the installer shall be responsible for ensuring that the proper antenna is employed so that the limits in this part are not exceeded.

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.

### 8.7.2 Result

PASS.

The EUT has two external antennas for 5G WIFI, the max gain:

Antenna 0: 5dBi

Antenna 1: 5dBi

Note:

- Antenna use a permanently attached antenna which is not replaceable.
- Not using a standard antenna jack or electrical connector for antenna replacement
- The antenna has to be professionally installed (please provide method of installation)

W

which in accordance to section 15.203, please refer to the internal photos.