

●  Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5180

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8054.74	V	53.37	-41.95	-27.00	-14.95
10743.10	V	55.33	-39.99	-27.00	-12.99
14123.69	V	62.10	-33.22	-27.00	-6.22
7918.64	H	51.36	-43.96	-27.00	-16.96
11287.15	H	59.10	-36.22	-27.00	-9.22
14310.66	H	62.16	-33.16	-27.00	-6.16

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5220

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8053.38	V	49.72	-45.60	-27.00	-18.60
10744.17	V	55.24	-40.08	-27.00	-13.08
14124.77	V	65.05	-30.27	-27.00	-3.27
7917.26	H	50.46	-44.86	-27.00	-17.86
11288.20	H	57.89	-37.43	-27.00	-10.43
14309.28	H	62.43	-32.89	-27.00	-5.89

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5240

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8051.79	V	49.24	-46.08	-27.00	-19.08
10745.22	V	54.38	-40.94	-27.00	-13.94
14123.25	V	64.53	-30.79	-27.00	-3.79
7915.84	H	50.08	-45.24	-27.00	-18.24
11289.19	H	58.08	-37.24	-27.00	-10.24
14307.85	H	61.78	-33.54	-27.00	-6.54

- Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).  
 (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

●  Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz)

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5180

Freq. (MHz)	Ant.Pol. H/V	PK (dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	Margin (dB)	AV (dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)	Margin (dB)
5033.65	H	39.28	74	-34.72	23.48	54	-30.52
5080.45	V	38.72	74	-35.28	22.75	54	-31.25

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5240

Freq. (MHz)	Ant.Pol. H/V	PK (dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	Margin (dB)	AV (dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)	Margin (dB)
4977.10	H	39.35	74	-34.65	22.86	54	-31.14
5072.00	V	39.48	74	-34.52	23.62	54	-30.38

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

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5180

Freq. (MHz)	Ant.Pol. H/V	PK (dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	Margin (dB)	AV (dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)	Margin (dB)
5431.07	H	40.93	74	-33.07	25.41	54	-28.59
5453.07	V	41.28	74	-32.72	25.73	54	-28.27

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5240

Freq. (MHz)	Ant.Pol. H/V	PK (dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	Margin (dB)	AV (dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)	Margin (dB)
5434.37	H	39.93	74	-34.07	24.15	54	-29.85
5445.92	V	40.45	74	-33.55	25.24	54	-28.76

●  Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5180

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5144.40	H	49.26	-45.97	-27	Pass
5145.40	V	50.11	-45.12	-27	Pass

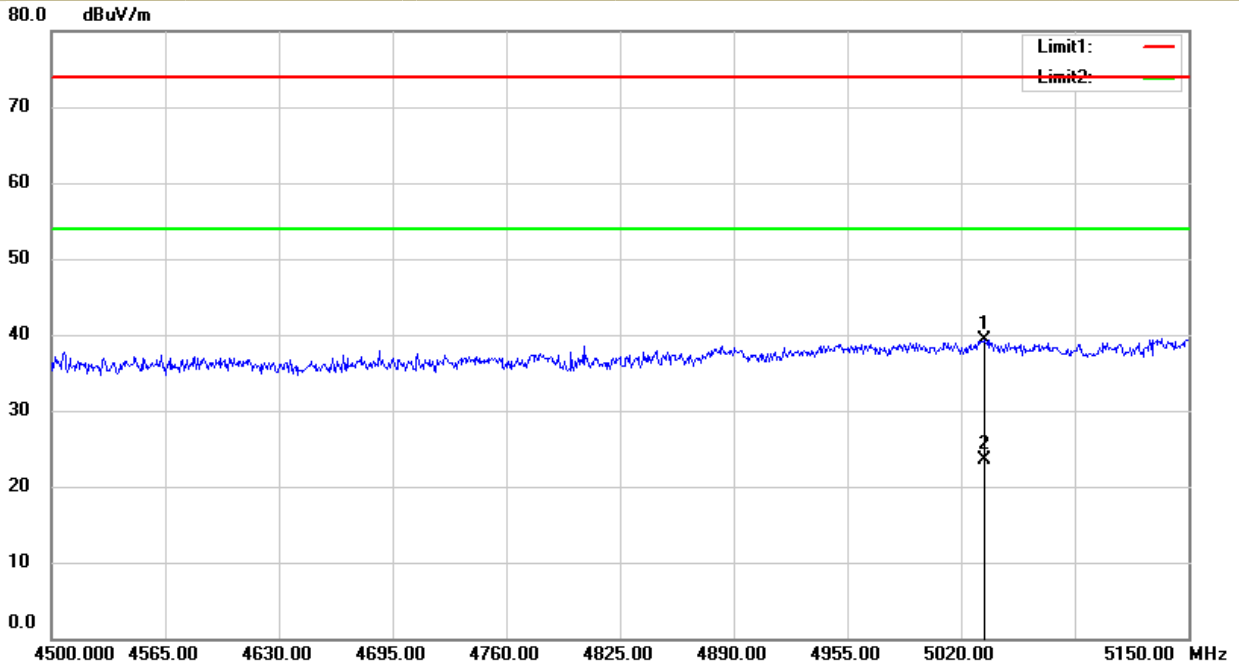
**Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).  
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
 (3)EIRP[dBm] = E[dBμV/m] + 20 log(d[meters]) - 104.77  
 d is the measurement distance in 3 meters

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5240

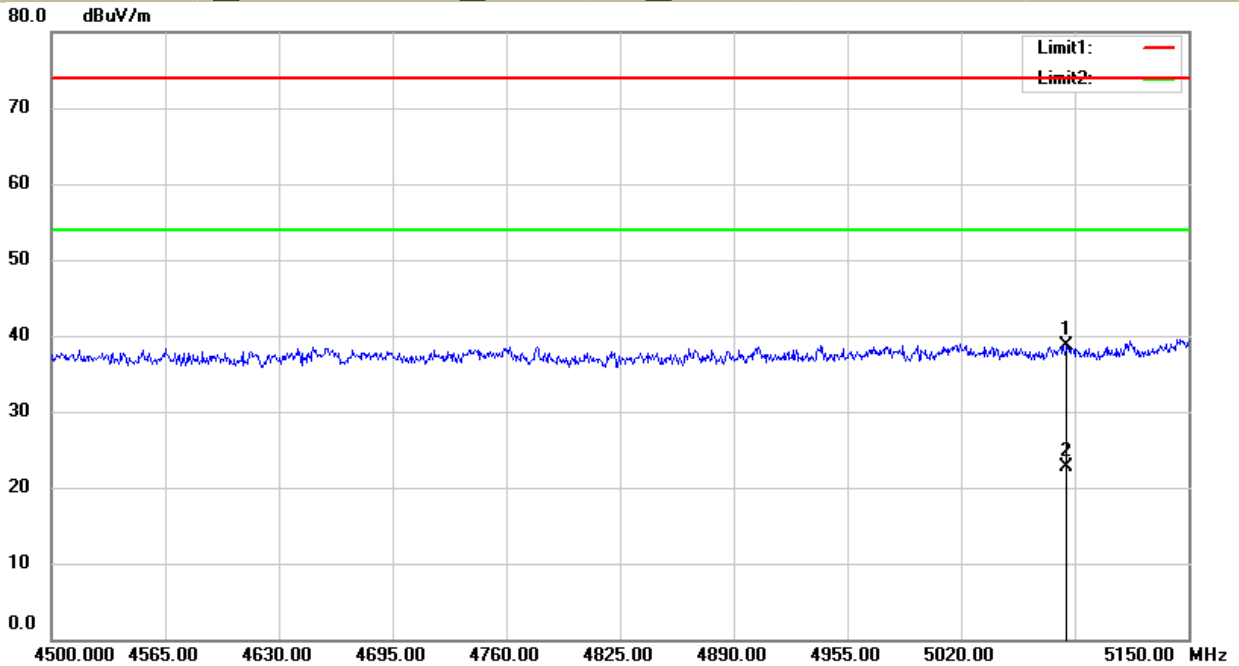
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
4980.25	H	40.05	-55.18	-27	Pass
5063.84	V	40.13	-55.10	-27	Pass

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).  
 (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

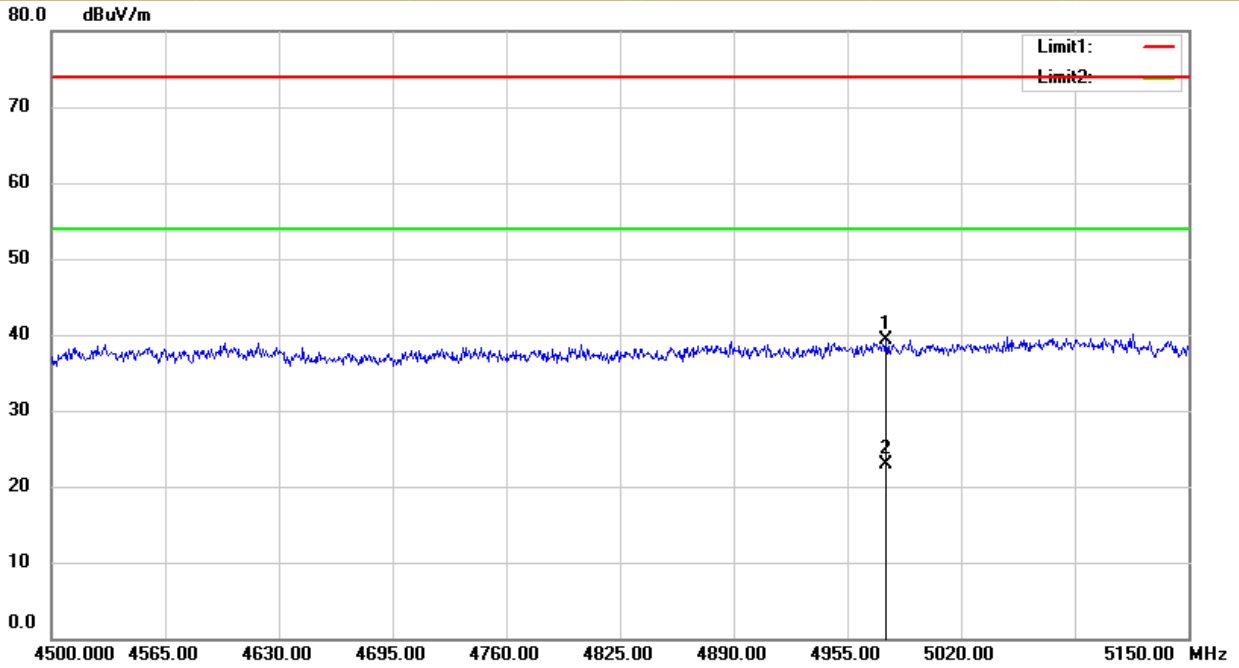
UNII Band I	
Test Model	Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz)
	<input checked="" type="checkbox"/> 802.11a <input type="checkbox"/> 802.11n(HT20) <input type="checkbox"/> 802.11n(HT40)
	<input checked="" type="checkbox"/> 5180 <input type="checkbox"/> 5200 <input type="checkbox"/> 5240      Ant.Pol      H



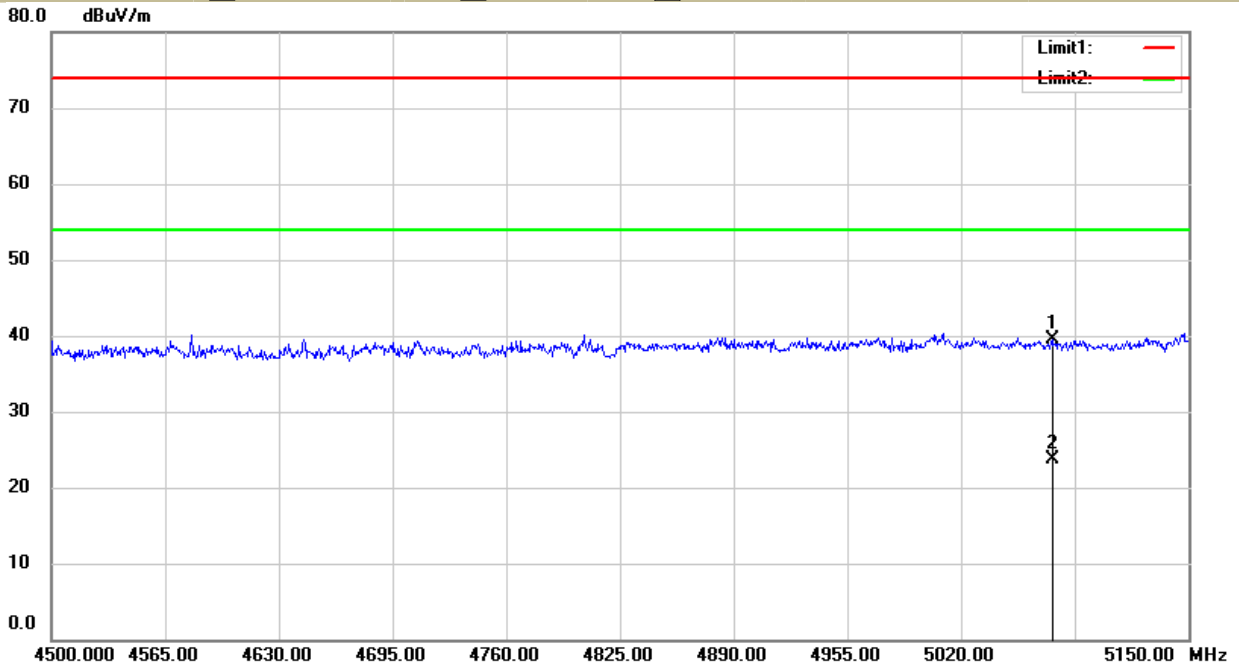
UNII Band I	
Test Model	Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz)
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	<input checked="" type="checkbox"/> 5180 <input type="checkbox"/> 5200 <input type="checkbox"/> 5240      Ant.Pol      V



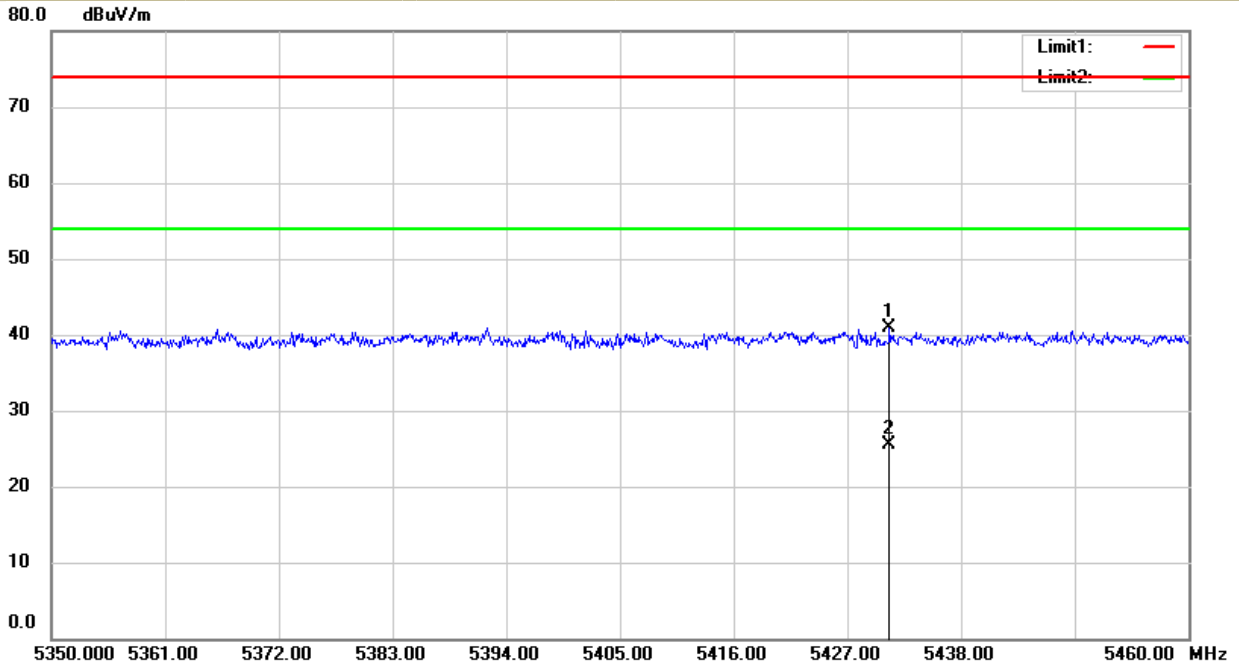
UNII Band I			
Test Model	Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz)		
	<input checked="" type="checkbox"/> 802.11a	<input type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)
	<input type="checkbox"/> 5180	<input type="checkbox"/> 5200	<input checked="" type="checkbox"/> 5240
			Ant.Pol H



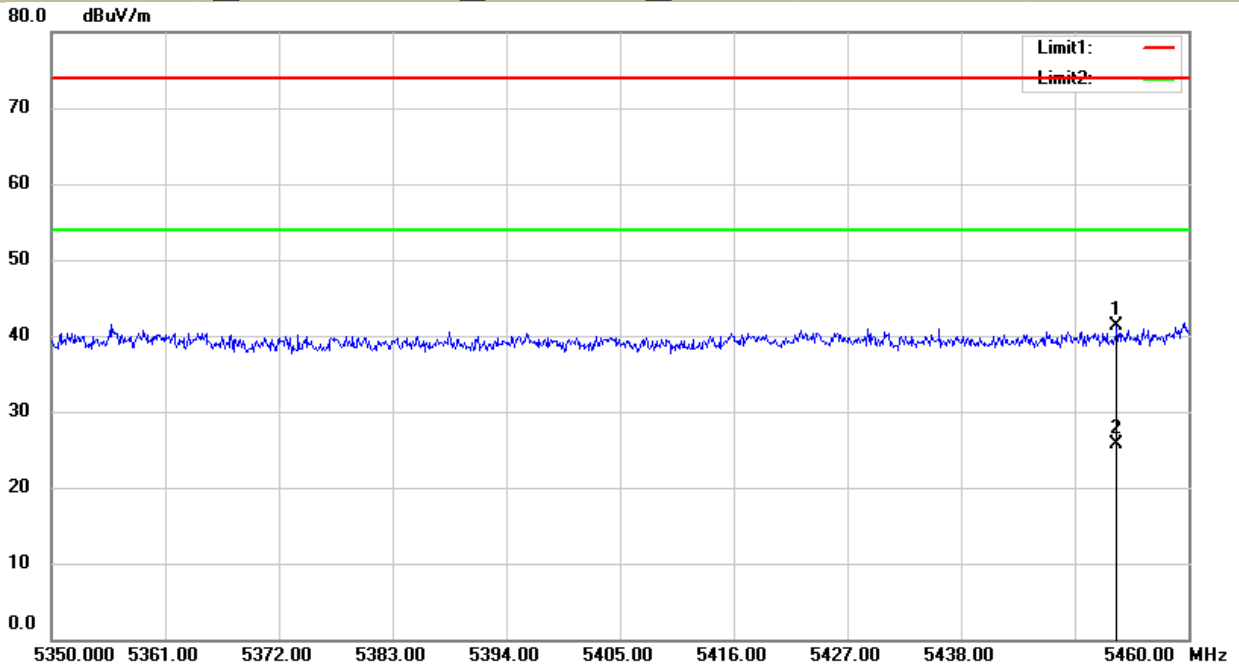
UNII Band I			
Test Model	Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz)		
	<input checked="" type="checkbox"/> 802.11a	<input type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)
	<input type="checkbox"/> 5180	<input type="checkbox"/> 5200	<input checked="" type="checkbox"/> 5240
			Ant.Pol V



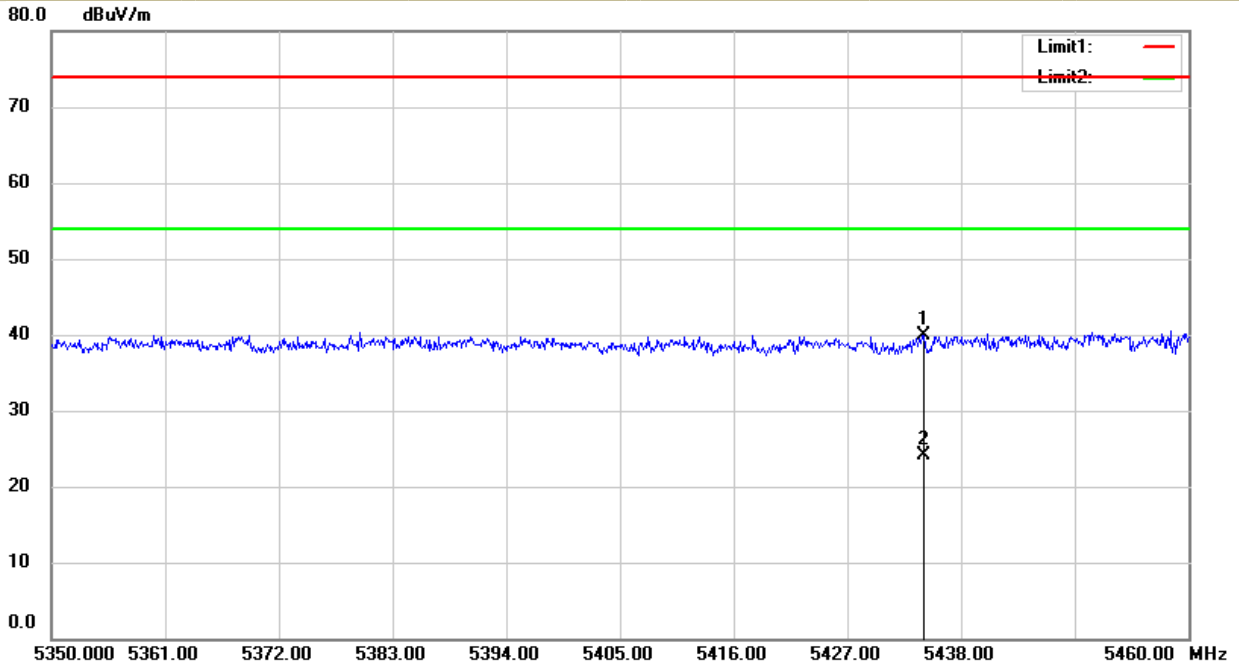
UNII Band I	
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5460MHz )
	<input checked="" type="checkbox"/> 802.11a <input type="checkbox"/> 802.11n(HT20) <input type="checkbox"/> 802.11n(HT40)
	<input checked="" type="checkbox"/> 5180 <input type="checkbox"/> 5200 <input type="checkbox"/> 5240      Ant.Pol      H



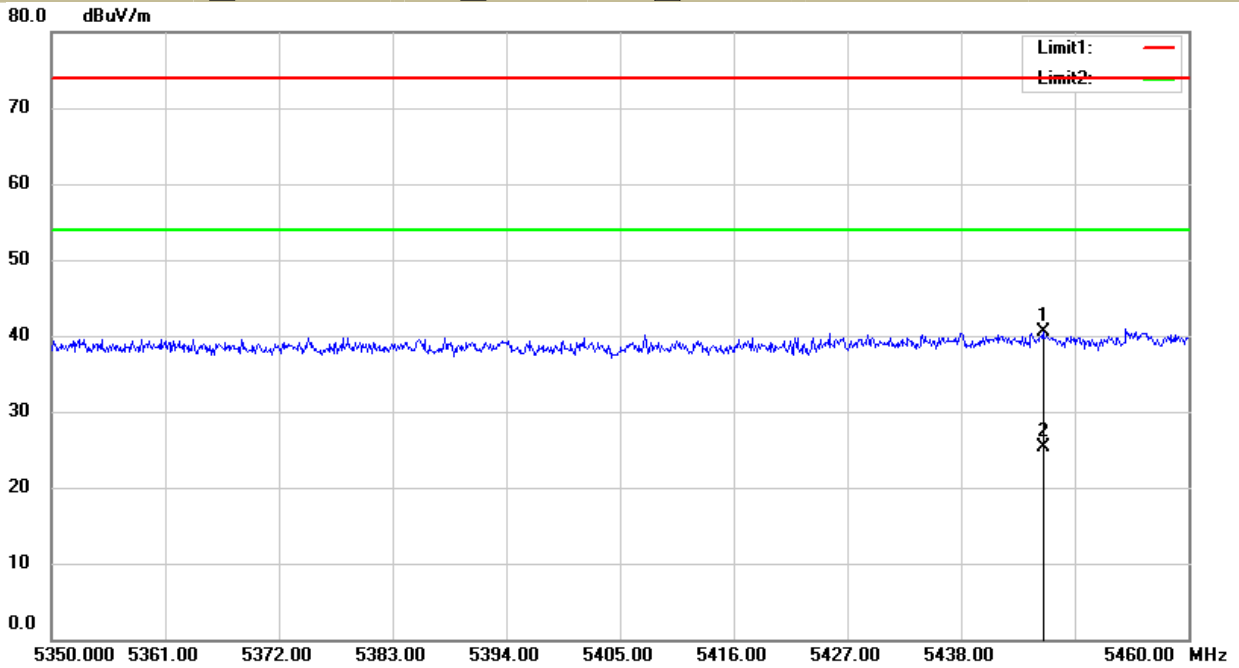
UNII Band I	
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5460MHz )
	<input checked="" type="checkbox"/> 802.11a <input type="checkbox"/> 802.11n(HT20) <input type="checkbox"/> 802.11n(HT40)
	<input checked="" type="checkbox"/> 5180 <input type="checkbox"/> 5200 <input type="checkbox"/> 5240      Ant.Pol      V



UNII Band I	
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5460MHz )
	<input checked="" type="checkbox"/> 802.11a <input type="checkbox"/> 802.11n(HT20) <input type="checkbox"/> 802.11n(HT40)
	<input type="checkbox"/> 5180 <input type="checkbox"/> 5200 <input checked="" type="checkbox"/> 5240      Ant.Pol      H

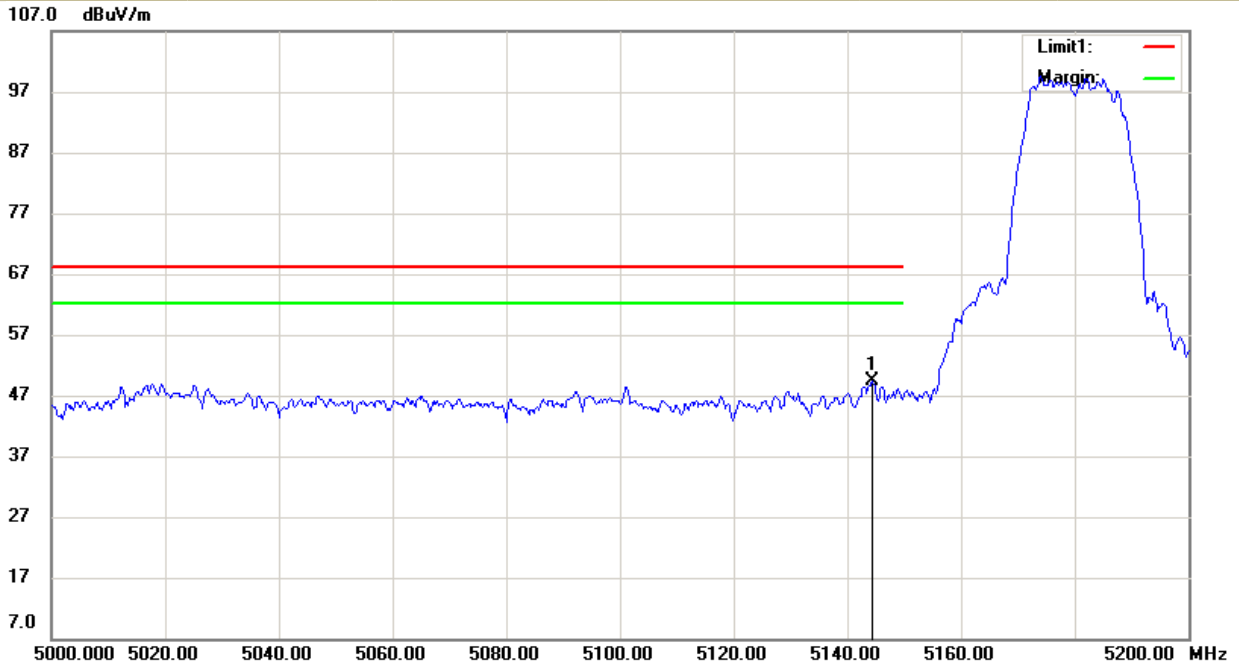


UNII Band I	
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5460MHz )
	<input checked="" type="checkbox"/> 802.11a <input type="checkbox"/> 802.11n(HT20) <input type="checkbox"/> 802.11n(HT40)
	<input type="checkbox"/> 5180 <input type="checkbox"/> 5200 <input checked="" type="checkbox"/> 5240      Ant.Pol      V

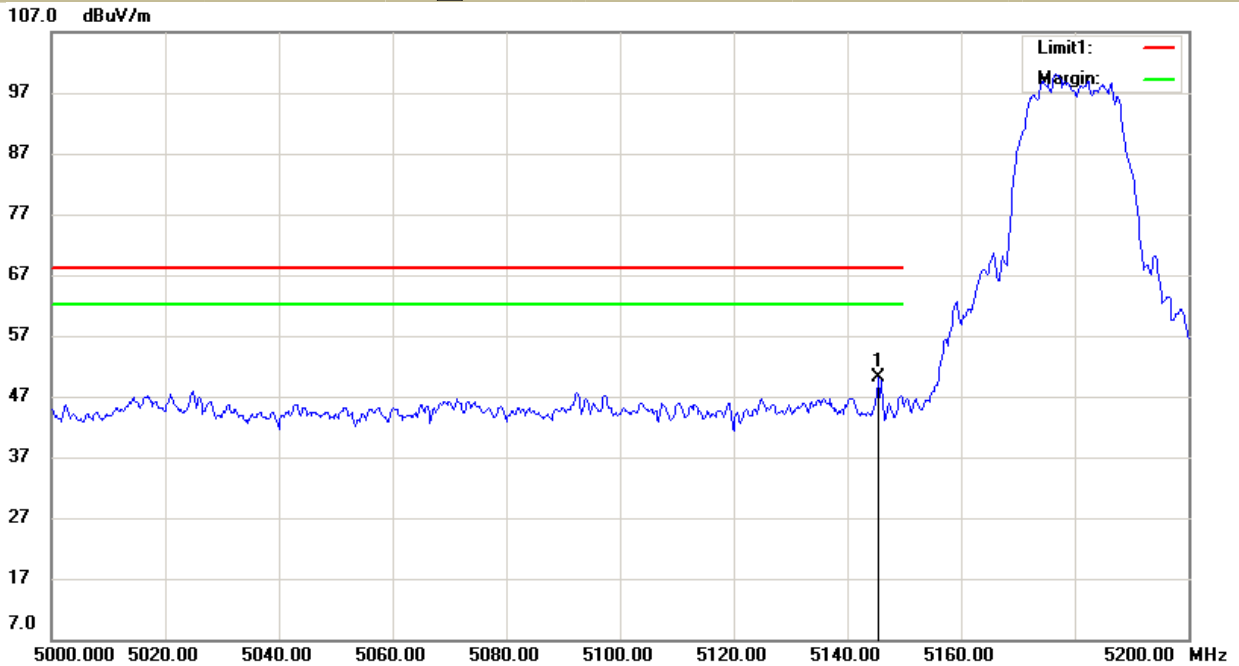




UNII Band I			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	<input checked="" type="checkbox"/> 802.11a	<input type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)
	<input checked="" type="checkbox"/> 5180		Ant. Pol: H



UNII Band I			
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"/> 802.11n(HT40)
	<input checked="" type="checkbox"/> 5180		Ant. Pol: V



- For Undesirable radiated Spurious Emission in UNII Band II-A  
All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:
- Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5260

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8053.27	V	52.47	-42.85	-27.00	-15.85
10744.07	V	54.68	-40.64	-27.00	-13.64
14119.82	V	62.53	-32.79	-27.00	-5.79
7917.12	H	53.22	-42.10	-27.00	-15.10
11288.33	H	55.71	-39.61	-27.00	-12.61
14309.18	H	64.27	-31.05	-27.00	-4.05

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5280

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8049.48	V	49.83	-45.49	-27.00	-18.49
10745.08	V	57.03	-38.29	-27.00	-11.29
14120.84	V	61.95	-33.37	-27.00	-6.37
7913.26	H	50.34	-44.98	-27.00	-17.98
11289.16	H	57.47	-37.85	-27.00	-10.85
14305.34	H	61.48	-33.84	-27.00	-6.84

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5320

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8050.53	V	48.95	-46.37	-27.00	-19.37
10746.16	V	56.79	-38.53	-27.00	-11.53
14117.08	V	61.27	-34.05	-27.00	-7.05
7916.64	H	52.30	-43.02	-27.00	-16.02
11290.17	H	54.92	-40.40	-27.00	-13.40
14303.86	H	60.84	-34.48	-27.00	-7.48

- Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).  
 (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

●  Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz)

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5260

Freq. (MHz)	Ant.Pol. H/V	PK (dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	Margin (dB)	AV (dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)	Margin (dB)
5148.70	H	41.35	74	-32.65	25.42	54	-28.58
4886.75	V	38.85	74	-35.15	22.76	54	-31.24

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5320

Freq. (MHz)	Ant.Pol. H/V	PK (dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	Margin (dB)	AV (dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)	Margin (dB)
4990.75	H	39.85	74	-34.15	23.58	54	-30.42
4579.95	V	39.62	74	-34.38	23.59	54	-30.41

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

Temperature :	28 °C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5260

Freq. (MHz)	Ant.Pol. H/V	PK (dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	Margin (dB)	AV (dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)	Margin (dB)
5437.45	H	40.26	74	-33.74	24.53	54	-29.47
5367.38	V	40.12	74	-33.88	22.98	54	-31.02

Temperature :	28 °C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5320

Freq. (MHz)	Ant.Pol. H/V	PK (dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	Margin (dB)	AV (dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)	Margin (dB)
5387.95	H	41.27	74	-32.73	24.23	54	-29.77
5363.64	V	40.02	74	-33.98	24.66	54	-29.34

●  Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Temperature :	28 °C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5260

Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5885.16	H	39.56	-55.67	-27	Pass
5369.10	V	50.31	-44.92	-27	Pass

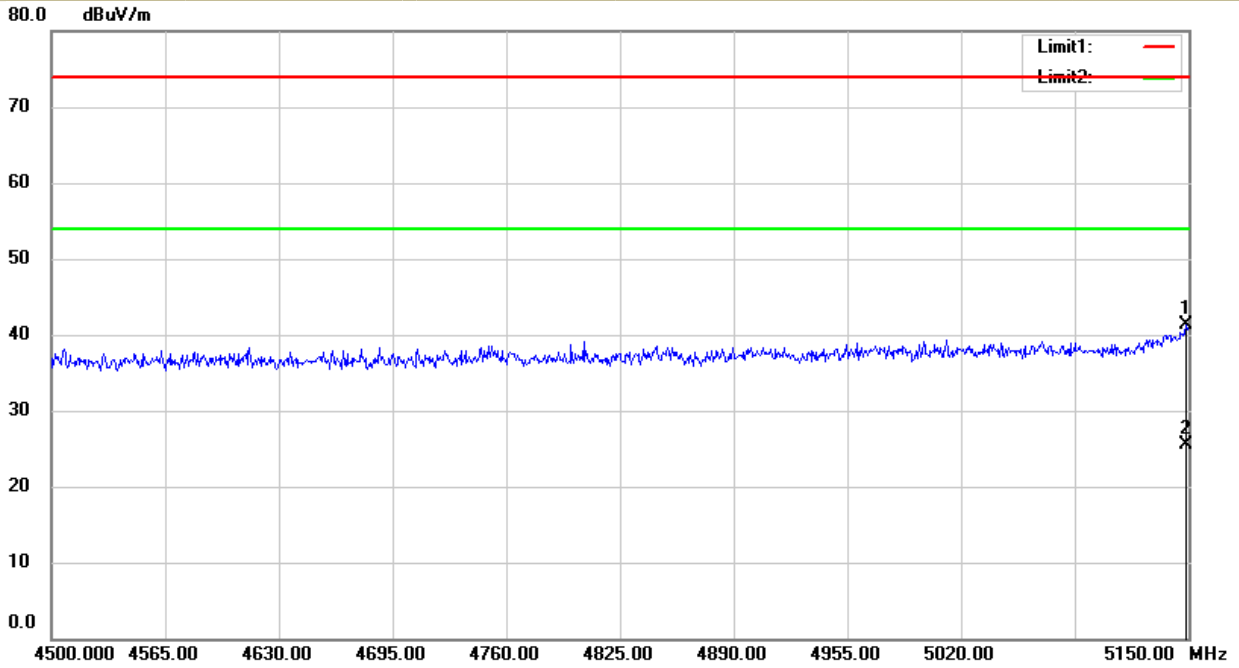
**Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).  
 (2) Emission Level= Reading Level+Probe Factor +Cable Loss.  
 (3)EIRP[dBm] = E[dBuV/m] + 20 log(d[meters]) - 104.77  
 d is the measurement distance in 3 meters

Temperature :	28 °C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5320

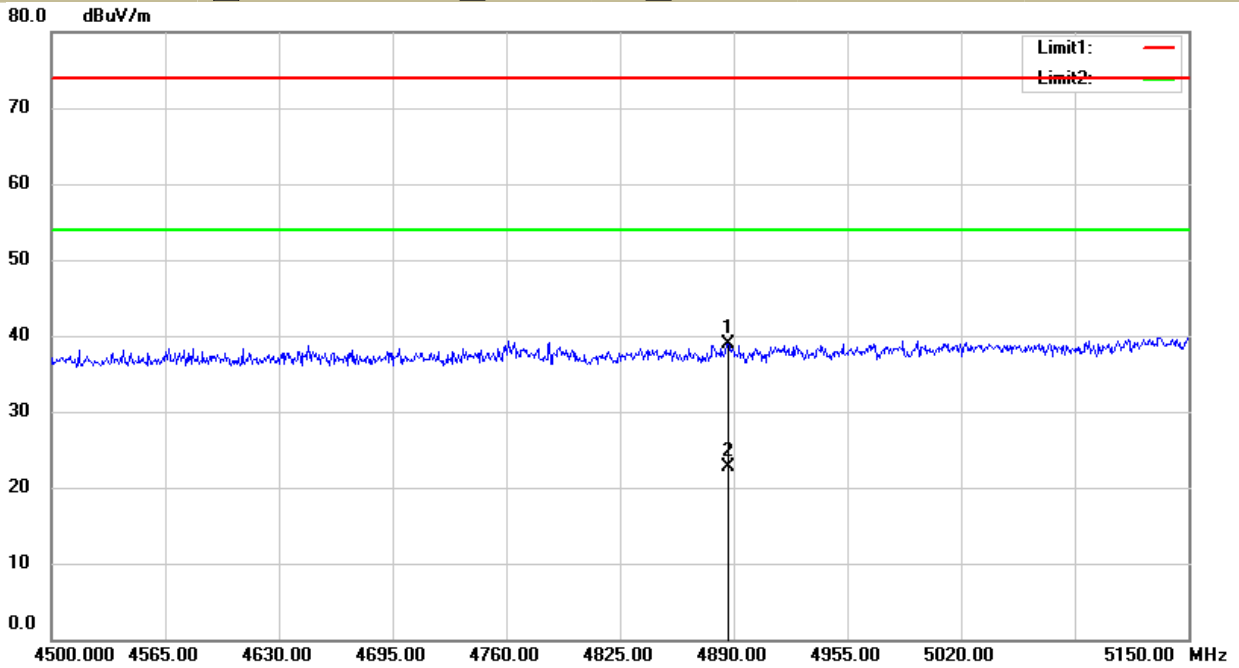
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5351.80	H	42.38	-44.18	-27	Pass
5369.10	V	50.31	-44.92	-27	Pass

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).  
 (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

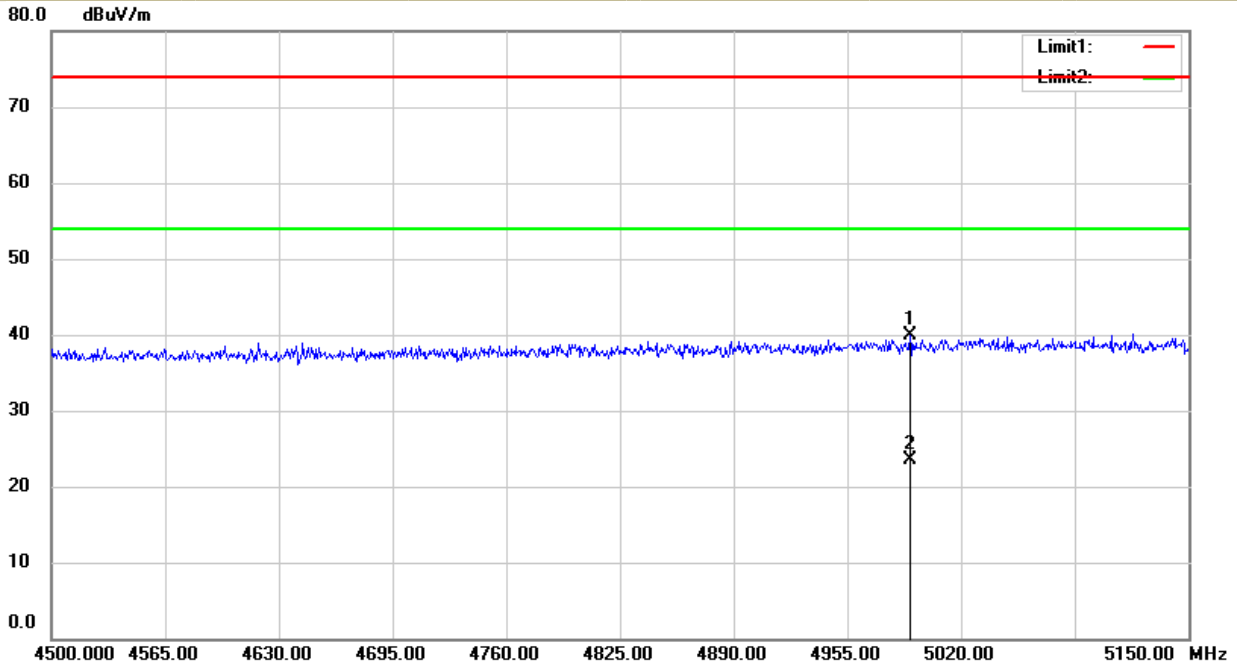
UNII Band II-A					
Test Model	Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz)				
	<input checked="" type="checkbox"/> 802.11a	<input type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)	Ant.Pol	H
	<input checked="" type="checkbox"/> 5260	<input type="checkbox"/> 5280	<input type="checkbox"/> 5320		



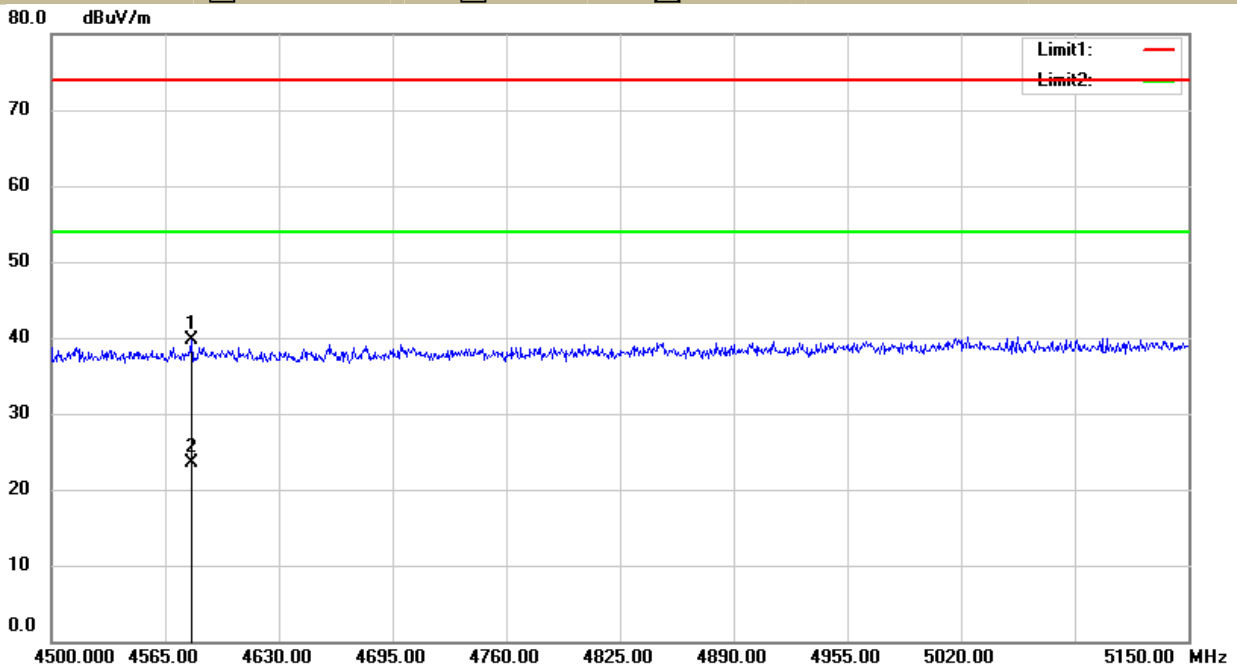
UNII Band II-A					
Test Model	Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz)				
	<input checked="" type="checkbox"/> 802.11a	<input type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)	Ant.Pol	V
	<input checked="" type="checkbox"/> 5260	<input type="checkbox"/> 5280	<input type="checkbox"/> 5320		



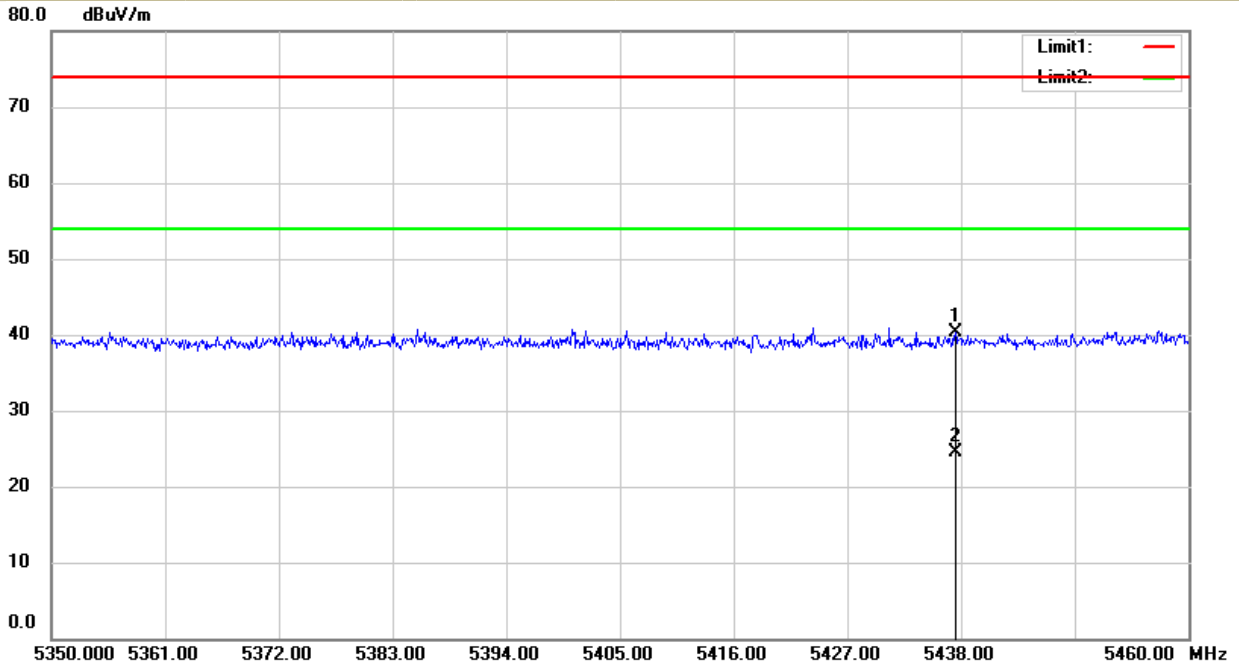
UNII Band II-A			
Test Model	Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz)		
	<input checked="" type="checkbox"/> 802.11a	<input type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)
	<input type="checkbox"/> 5260	<input type="checkbox"/> 5280	<input checked="" type="checkbox"/> 5320
			Ant.Pol H



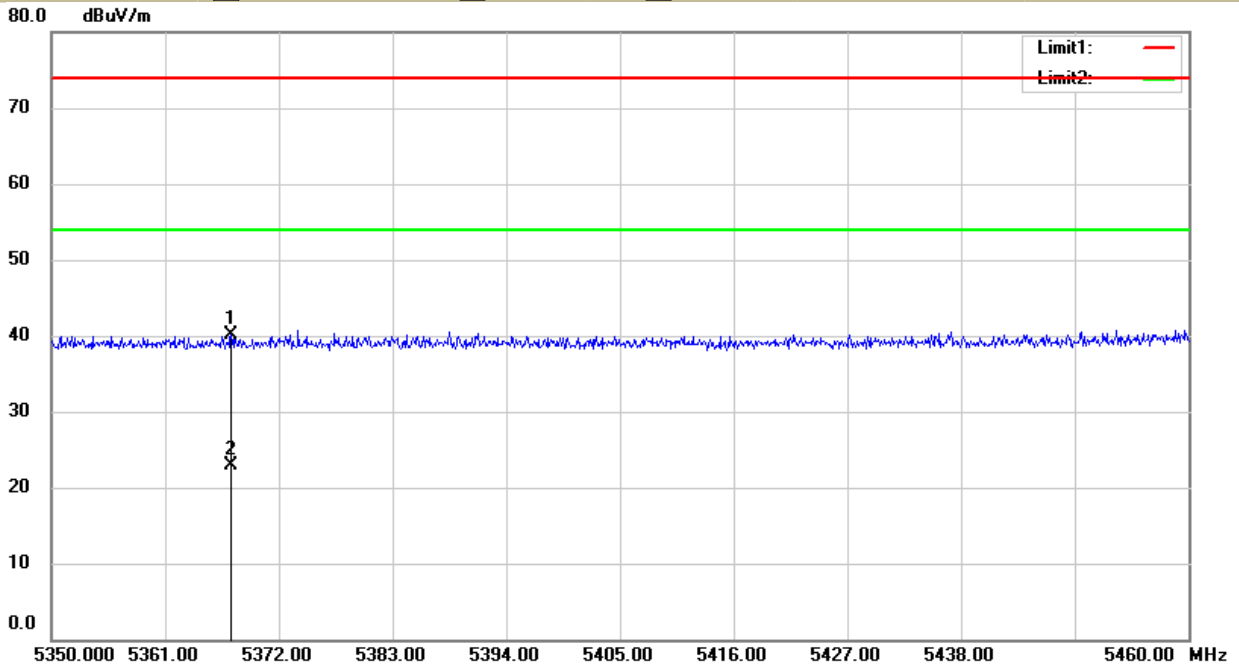
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Test Model	Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz)		
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	<input type="checkbox"/> 5260	<input type="checkbox"/> 5280	<input checked="" type="checkbox"/> 5320
			Ant.Pol V



UNII Band II-A					
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5460MHz )				
	<input checked="" type="checkbox"/> 802.11a	<input type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)	Ant. Pol	H
	<input checked="" type="checkbox"/> 5260	<input type="checkbox"/> 5280	<input type="checkbox"/> 5320		

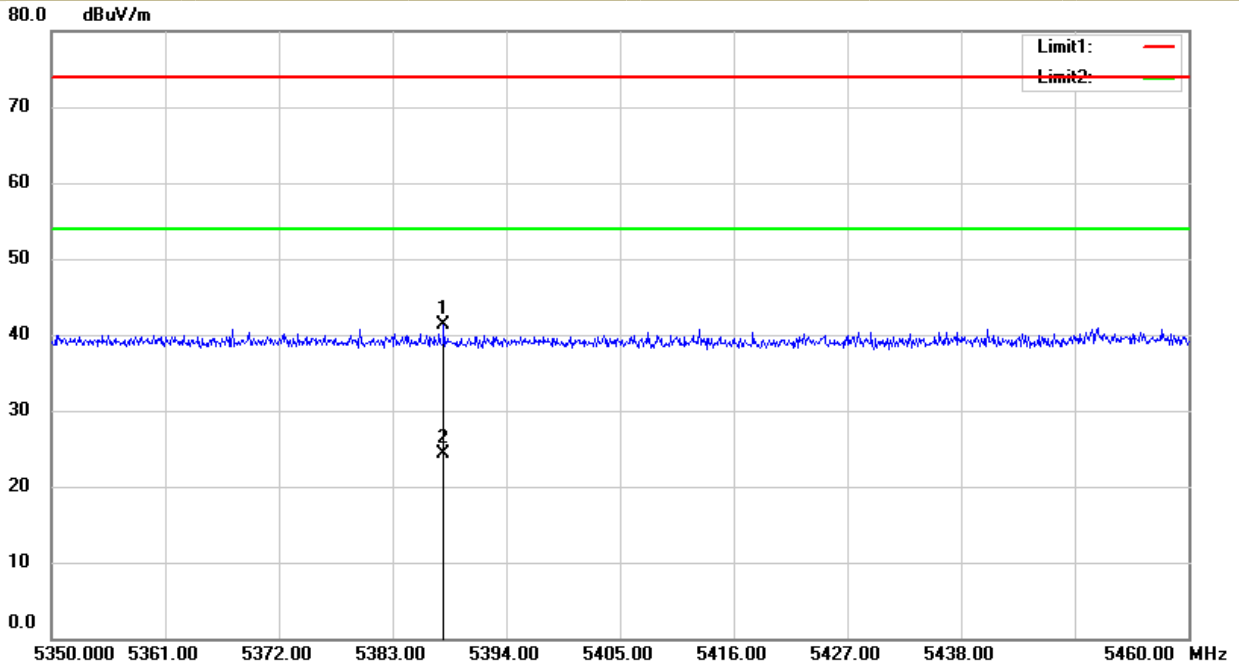


UNII Band II-A					
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5460MHz )				
	<input checked="" type="checkbox"/> 802.11a	<input type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)	Ant. Pol	V
	<input checked="" type="checkbox"/> 5260	<input type="checkbox"/> 5280	<input type="checkbox"/> 5320		

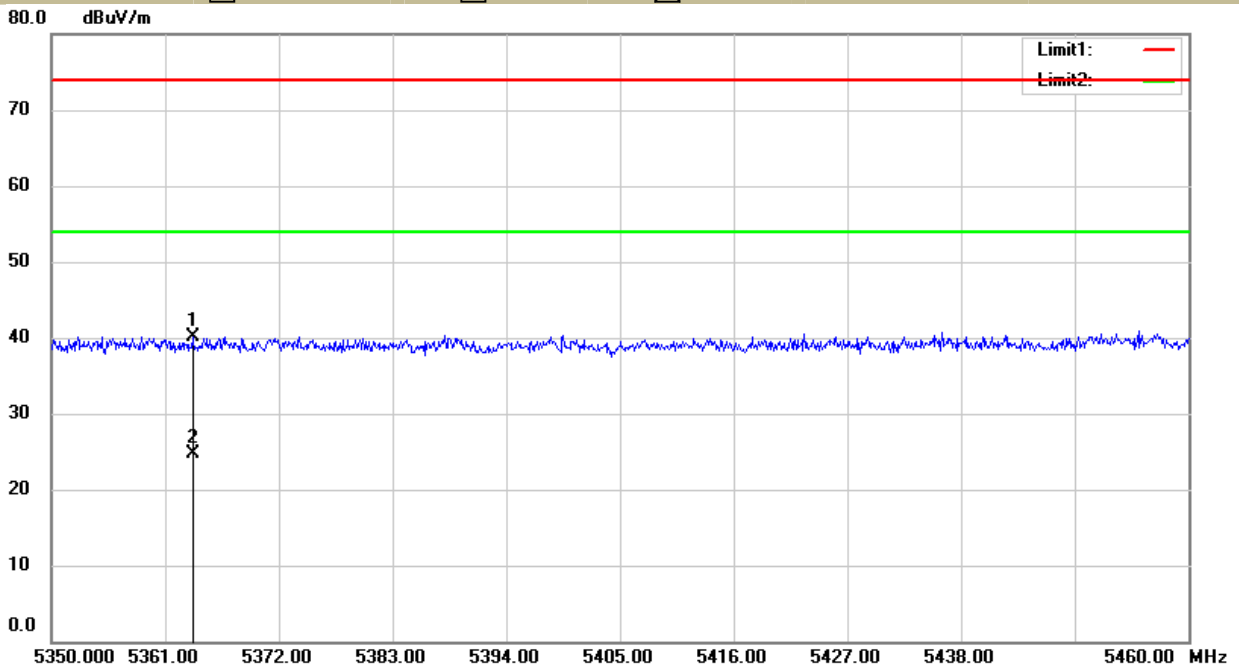




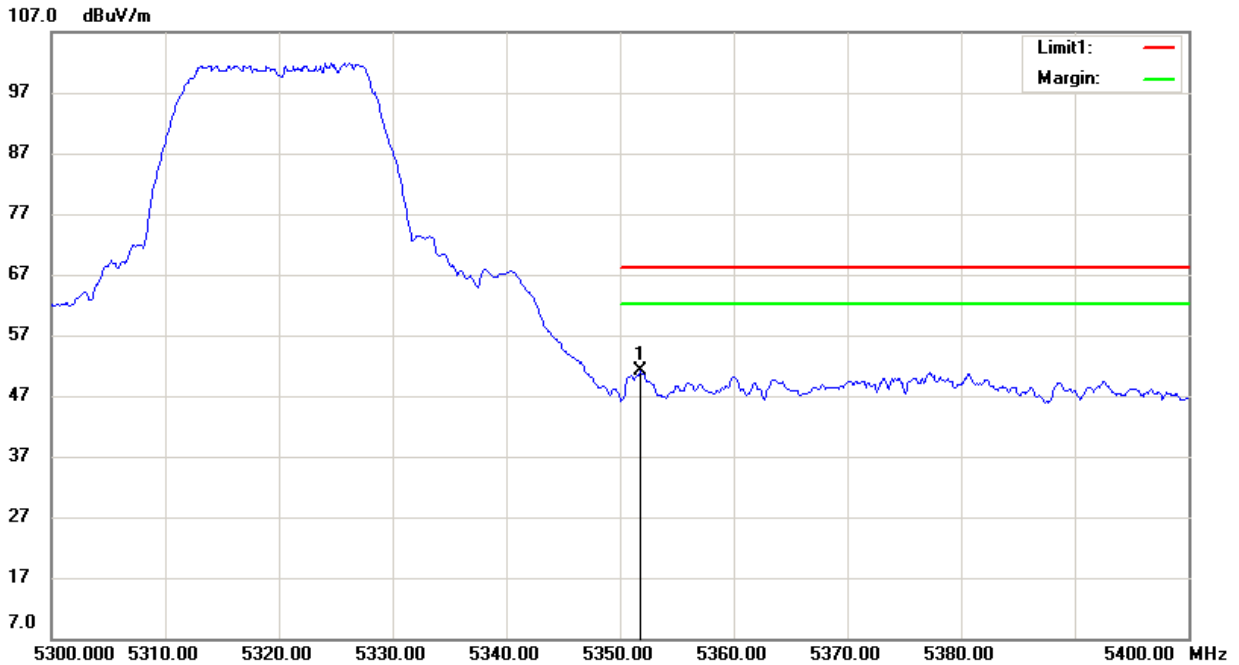
UNII Band II-A					
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5460MHz )				
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	<input type="checkbox"/> 5260	<input type="checkbox"/> 5280	<input checked="" type="checkbox"/> 5320		



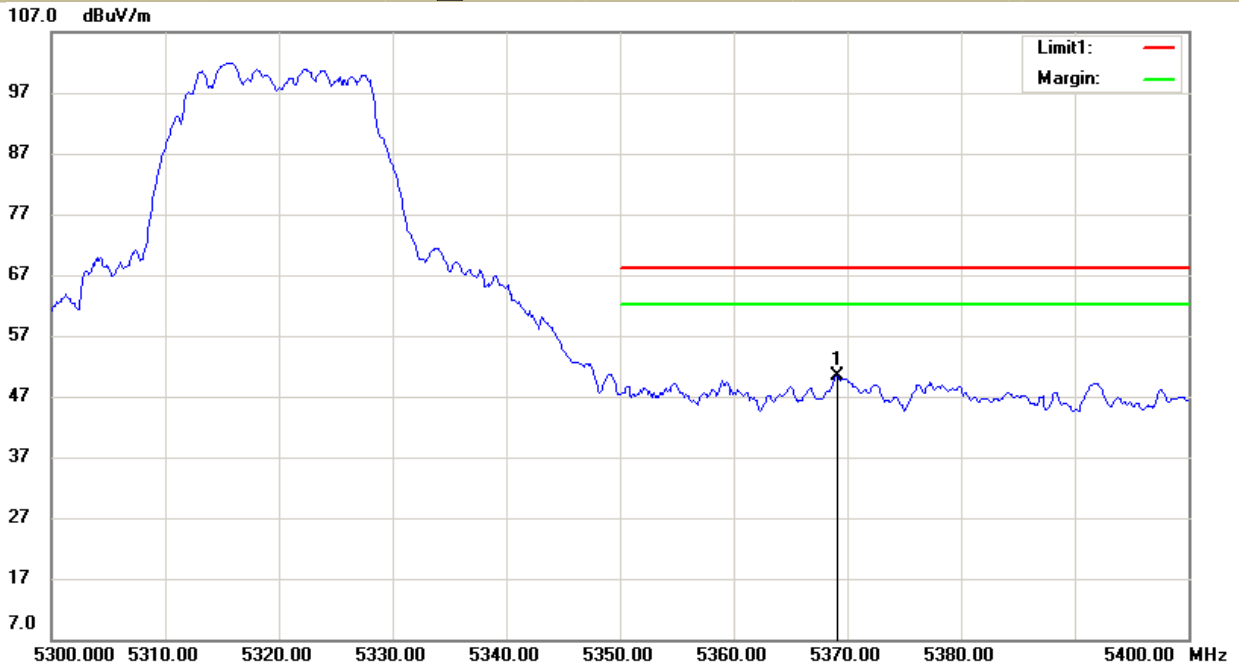
UNII Band II-A					
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5460MHz )				
	<input checked="" type="checkbox"/> 802.11a	<input type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)	Ant.Pol	V
	<input type="checkbox"/> 5260	<input type="checkbox"/> 5280	<input checked="" type="checkbox"/> 5320		



UNII Band II-A			
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"/> 802.11n(HT40)
	<input checked="" type="checkbox"/> 5320		Ant.Pol H



UNII Band II-A			
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"/> 802.11n(HT40)
	<input checked="" type="checkbox"/> 5320		Ant.Pol V



- For Undesirable radiated Spurious Emission in UNII Band II-C  
All the modes 802.11a/n/ac has been tested and the worst result 802.11a recorded as below:
- Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5500

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8051.73	V	49.38	-45.94	-27.00	-18.94
10742.60	V	56.52	-38.80	-27.00	-11.80
14121.95	V	60.76	-34.56	-27.00	-7.56
7914.27	H	52.56	-42.76	-27.00	-15.76
11285.40	H	54.63	-40.69	-27.00	-13.69
14308.70	H	63.59	-31.73	-27.00	-4.73

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5600

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8051.67	V	48.88	-46.44	-27.00	-19.44
10744.84	V	55.96	-39.36	-27.00	-12.36
14120.77	V	60.84	-34.48	-27.00	-7.48
7910.58	H	49.48	-45.84	-27.00	-18.84
11288.83	H	56.16	-39.16	-27.00	-12.16
14307.38	H	60.95	-34.37	-27.00	-7.37

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5700

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
8052.67	V	48.13	-47.19	-27.00	-20.19
10743.36	V	55.28	-40.04	-27.00	-13.04
14121.54	V	59.86	-35.46	-27.00	-8.46
7911.47	H	51.61	-43.71	-27.00	-16.71
11287.28	H	53.24	-42.08	-27.00	-15.08
14305.93	H	60.45	-34.87	-27.00	-7.87

- Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).  
 (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

- Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz and 5350-5460MHz)

Temperature :	28 °C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5500

Freq. (MHz)	Ant.Pol. H/V	PK (dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	Margin (dB)	AV (dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)	Margin (dB)
5264.16	H	39.84	74	-34.16	24.29	54	-29.71
5287.20	V	39.74	74	-34.26	23.76	54	-30.24

Temperature :	28 °C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5700

Freq. (MHz)	Ant.Pol. H/V	PK (dBuV/m) (VBW=3MHz)	Limit 3m (dBuV/m)	Margin (dB)	AV (dBuV/m) (VBW=10Hz)	Limit 3m (dBuV/m)	Margin (dB)
5352.48	H	40.56	74	-33.44	26.78	54	-27.22
5263.20	V	40.09	74	-33.91	24.64	54	-29.36

●  Undesirable radiated Undesirable radiated Spurious Emission in Band Edge

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5500

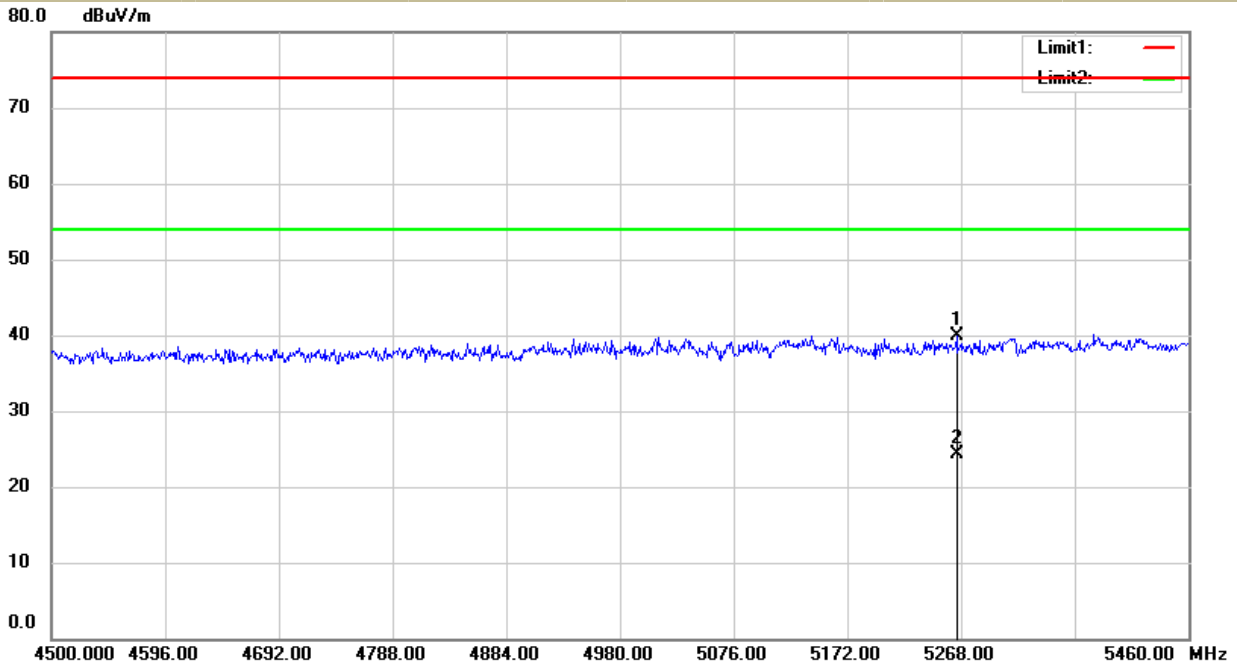
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5465.60	H	50.34	-44.89	-27	Pass
5466.10	V	49.27	-45.96	-27	Pass

Temperature :	28°C	Test Date :	July 09, 2016
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5700

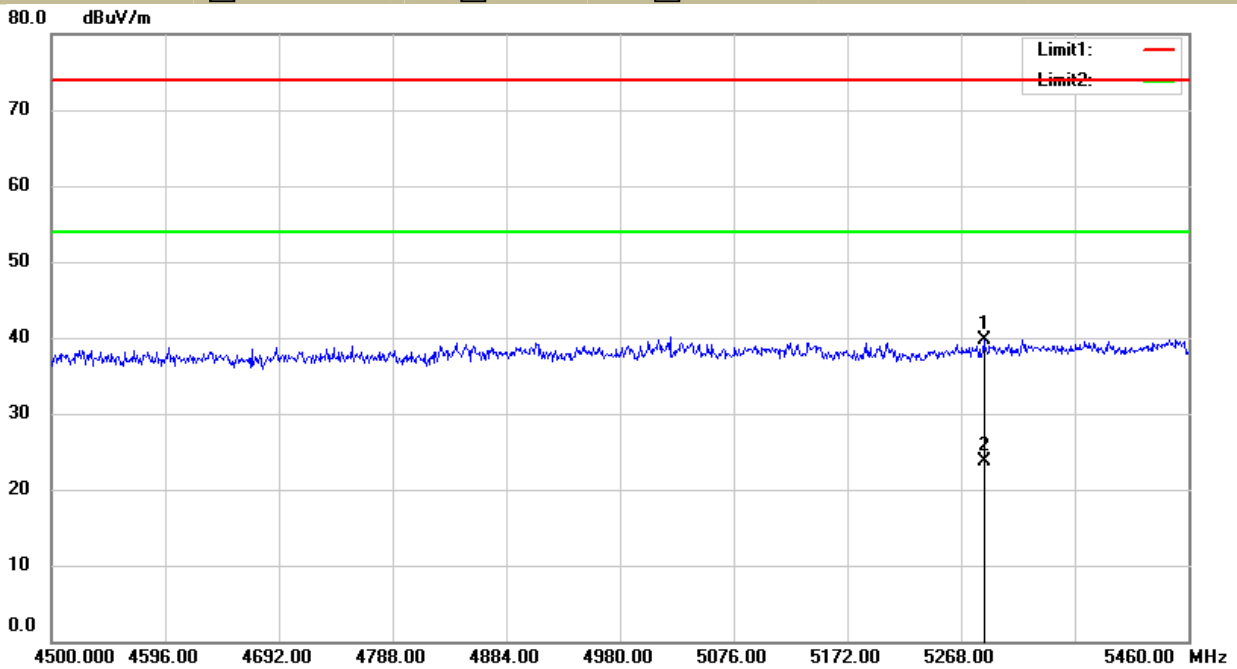
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5730.12	H	51.42	-43.81	-27	Pass
5727.12	V	46.05	-49.18	-27	Pass

**Note:** (1) All Readings are Peak Value (VBW=3MHz) and Peak Value (VBW=10Hz).  
 (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

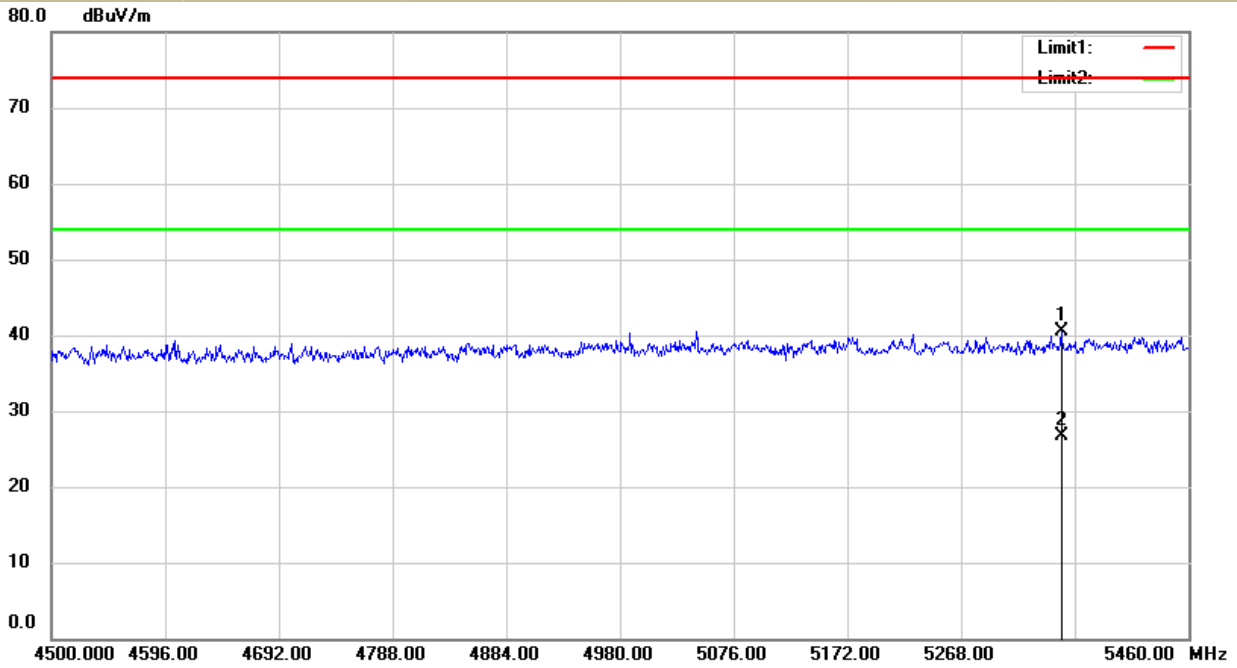
<b>UNII Band II-C</b>	
Test Model	Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz and 5350-5460MHz )
	<input checked="" type="checkbox"/> 5500 <input checked="" type="checkbox"/> 802.11a <input type="checkbox"/> 5600 <input type="checkbox"/> 802.11n(HT20) <input type="checkbox"/> 802.11n(HT40)
	Ant.Pol     H



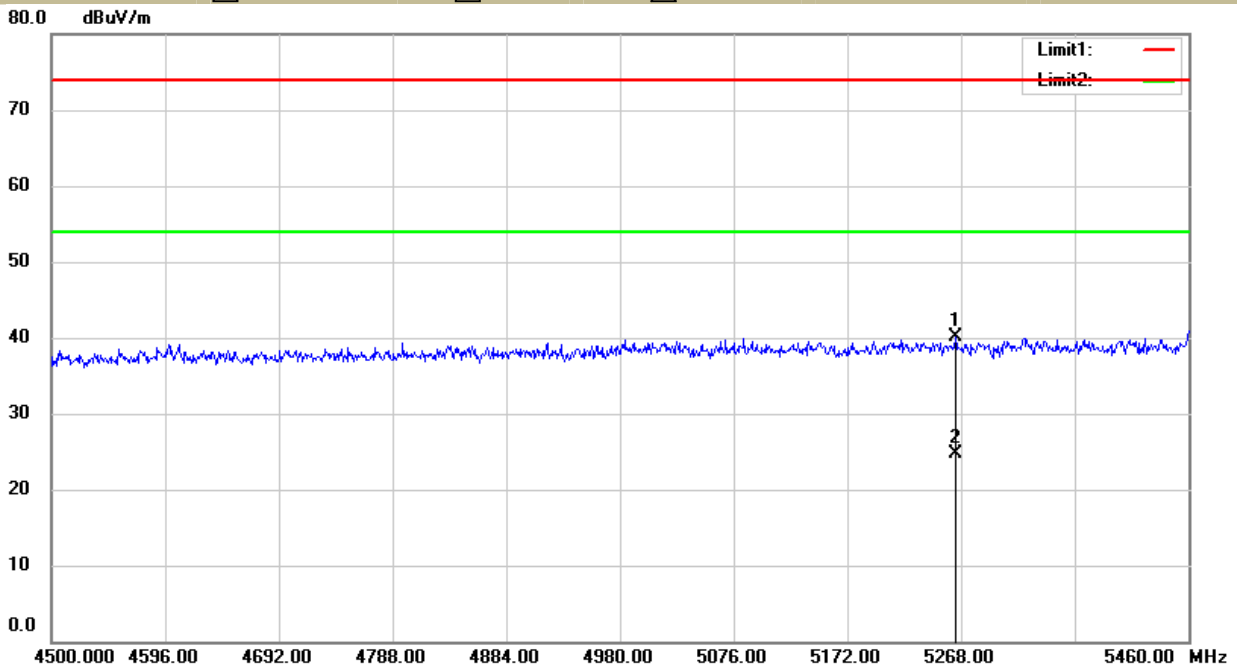
<b>UNII Band II-C</b>	
Test Model	Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz and 5350-5460MHz )
	<input checked="" type="checkbox"/> 5500 <input checked="" type="checkbox"/> 802.11a <input type="checkbox"/> 5600 <input type="checkbox"/> 802.11n(HT20) <input type="checkbox"/> 802.11n(HT40)
	Ant.Pol     V



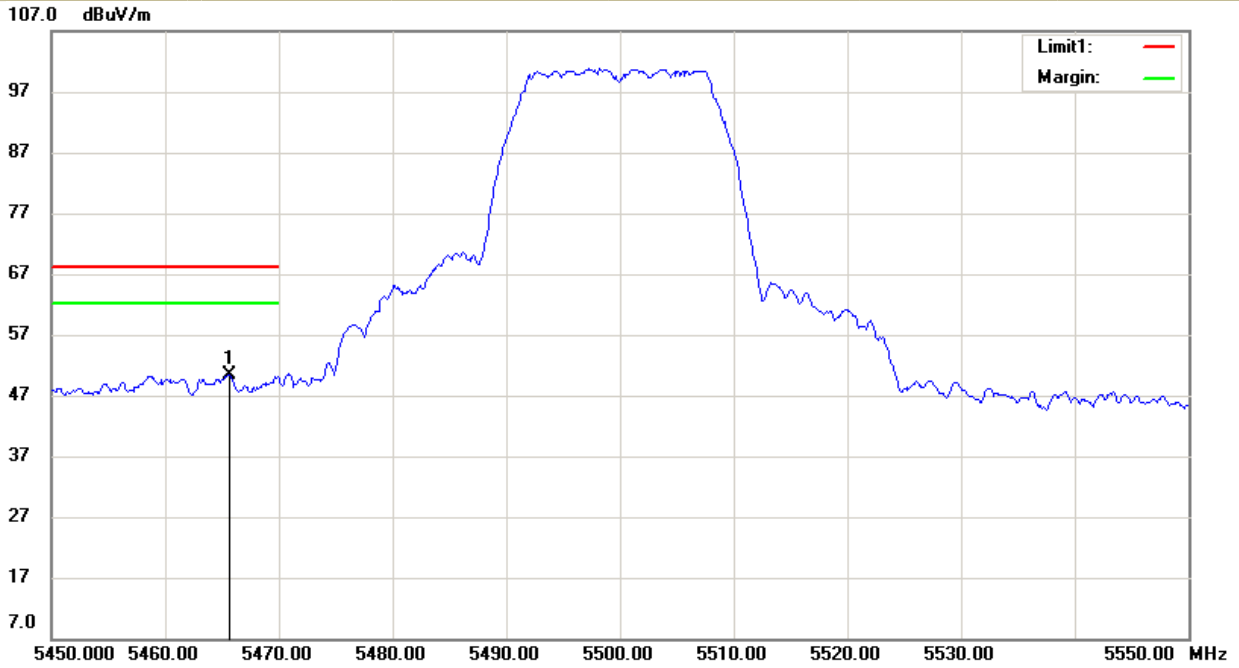
UNII Band II-C	
Test Model	Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz and 5350-5460MHz )
	<input type="checkbox"/> 5500 <input checked="" type="checkbox"/> 802.11a <input type="checkbox"/> 5600 <input type="checkbox"/> 802.11n(HT20) <input type="checkbox"/> 802.11n(HT40)
	<input type="checkbox"/> Ant.Pol <input type="checkbox"/> H



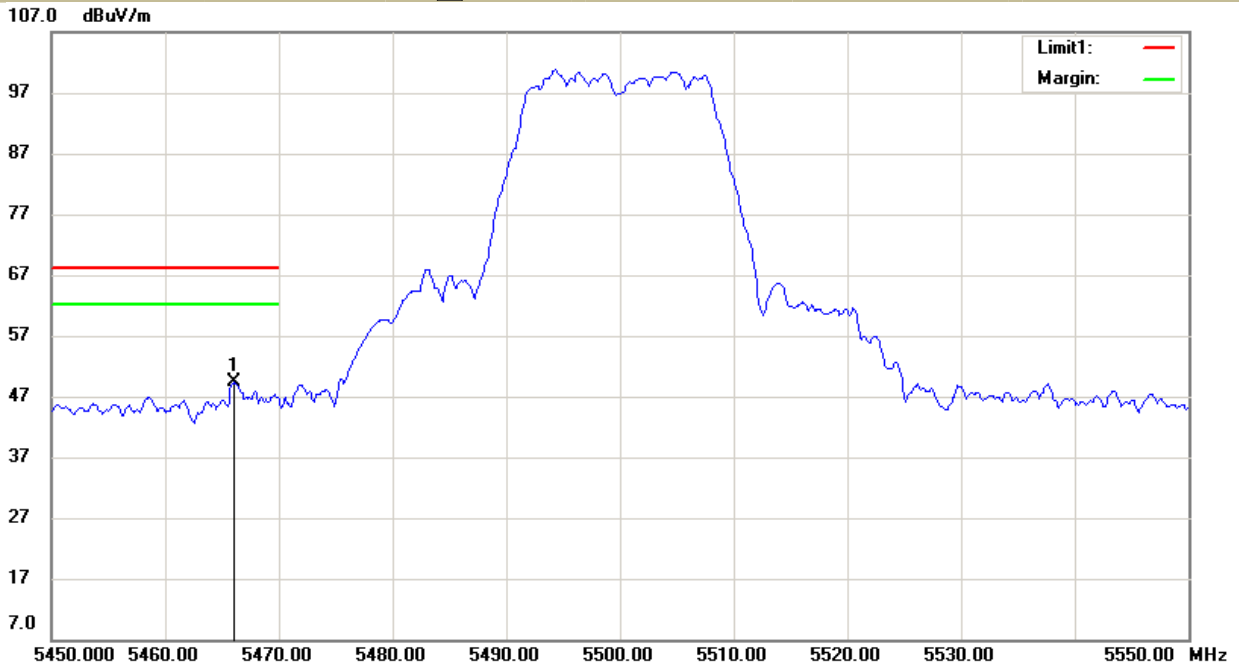
UNII Band II-C	
Test Model	Undesirable radiated Spurious Emission in Restricted Band (4500-5100MHz and 5350-5460MHz )
	<input checked="" type="checkbox"/> 802.11a <input type="checkbox"/> 5500 <input type="checkbox"/> 5600 <input type="checkbox"/> 802.11n(HT20) <input type="checkbox"/> 802.11n(HT40)
	<input type="checkbox"/> Ant.Pol <input type="checkbox"/> V



UNII Band II-C			
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"/> 802.11n(HT40)
	<input checked="" type="checkbox"/> 5500		Ant. Pol H

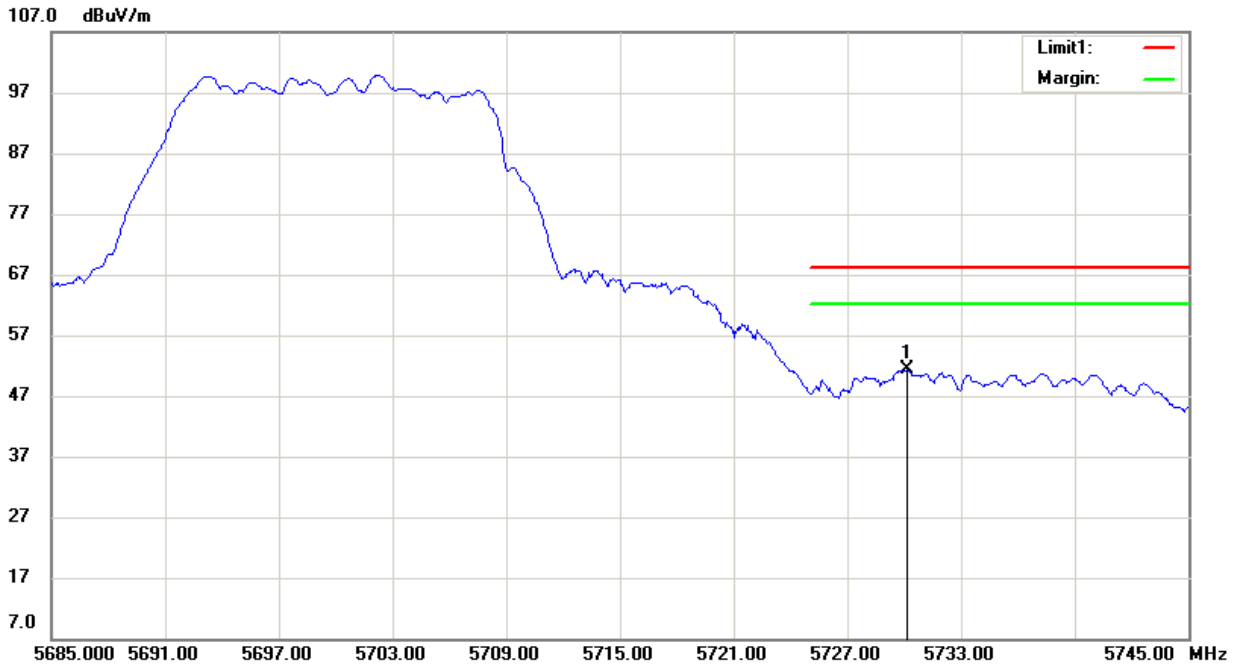


UNII Band II-C			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	<input checked="" type="checkbox"/> 802.11a	<input type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)
	<input checked="" type="checkbox"/> 5500		Ant. Pol V

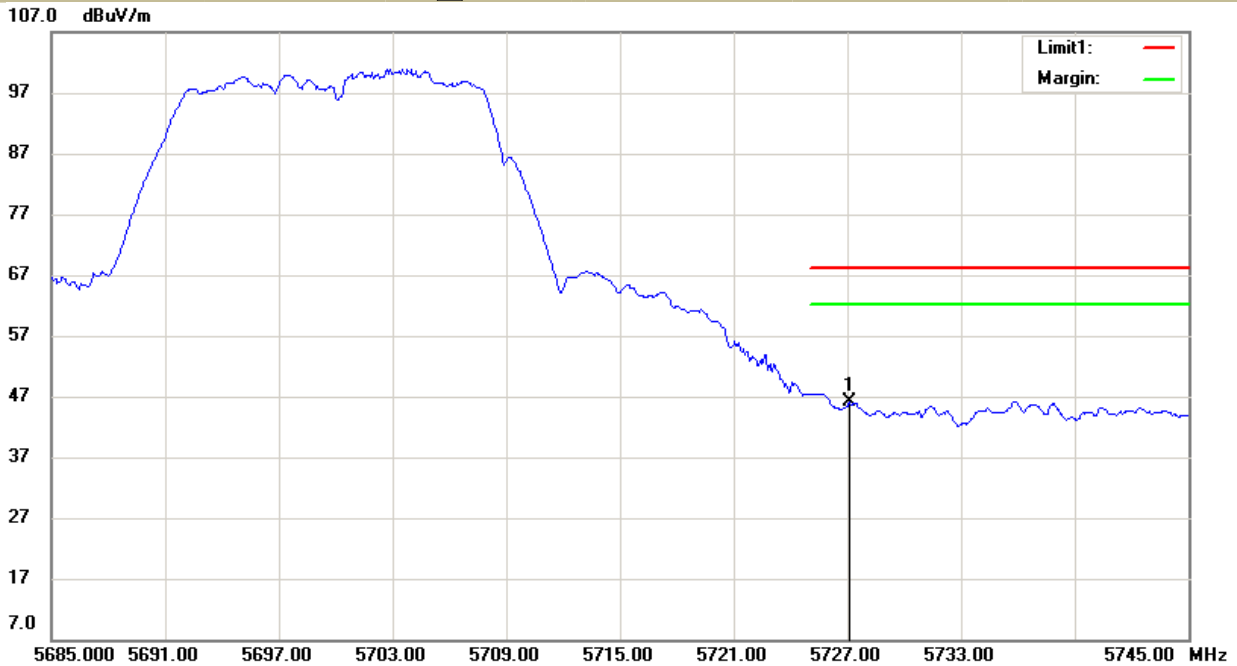




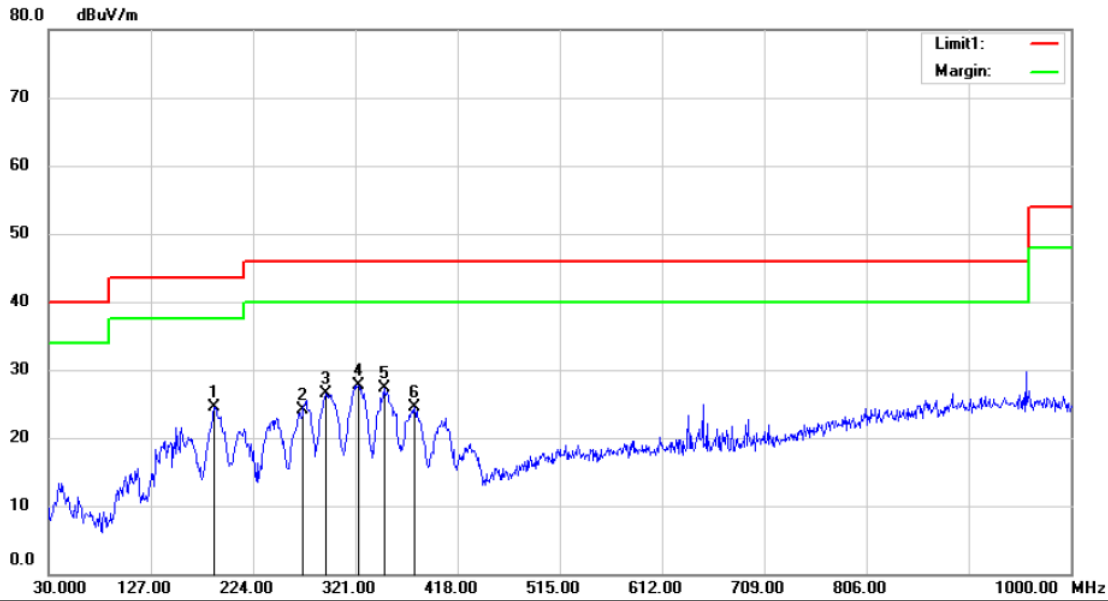
UNII Band II-C			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	<input checked="" type="checkbox"/> 802.11a	<input type="checkbox"/> 802.11n(HT20)	<input type="checkbox"/> 802.11n(HT40)
	<input checked="" type="checkbox"/> 5700		Ant.Pol H



UNII Band II-C			
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"/> 802.11n(HT40)
	<input checked="" type="checkbox"/> 5700		Ant.Pol V



● Undesirable radiated Spurious Emission below 1GHz (30MHz to 1GHz)

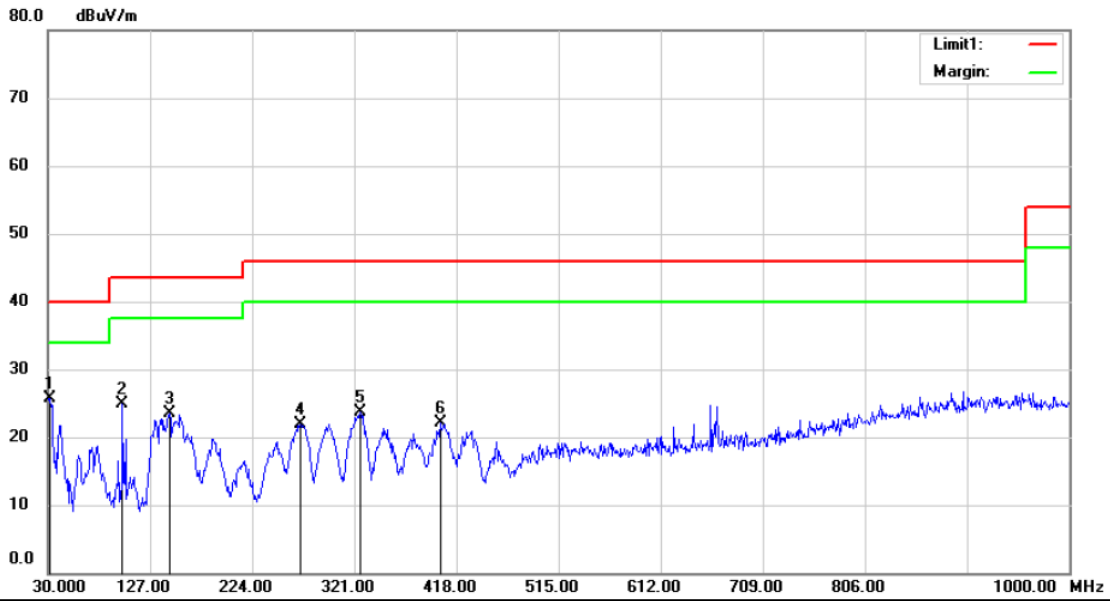


Site 3m Chamber #3 Polarization: *Horizontal* Temperature: 24 C  
 Limit: (RE)FCC PART 15.407 Power: AC 120V/60Hz Humidity: 53 %  
 Mode:11A 5180  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Antenna Height	Table Degree	Comment
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	
1		187.1400	42.33	-17.77	24.56	43.50	-18.94	QP		
2		271.5300	36.84	-12.67	24.17	46.00	-21.83	QP		
3		292.8700	39.85	-13.39	26.46	46.00	-19.54	QP		
4	*	323.9100	41.05	-13.30	27.75	46.00	-18.25	QP		
5		348.1600	39.01	-11.77	27.24	46.00	-18.76	QP		
6		377.2600	34.58	-10.10	24.48	46.00	-21.52	QP		

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

Operator: KK

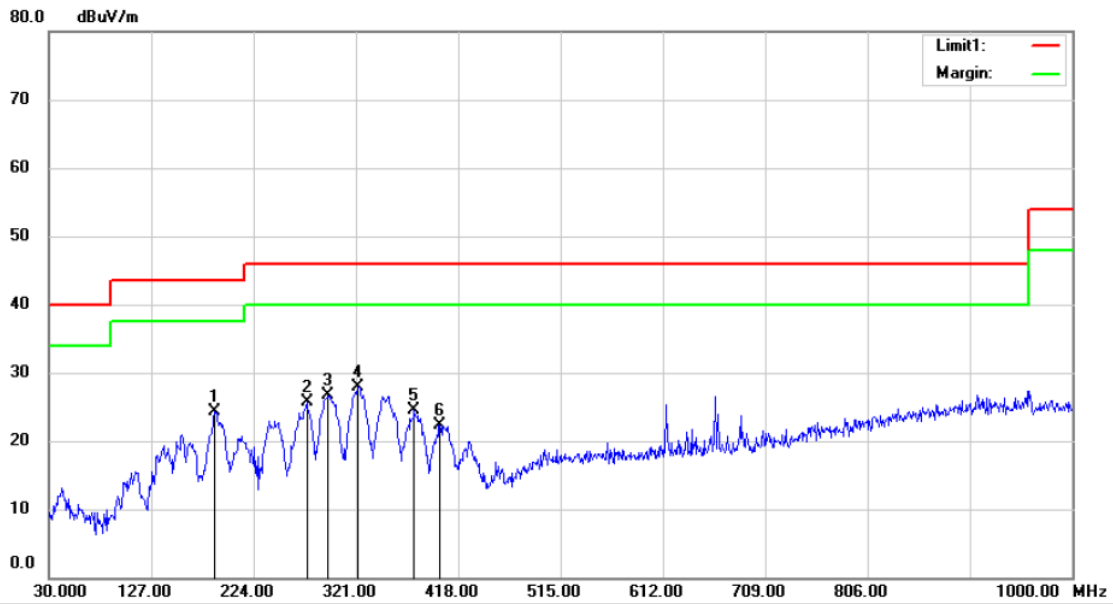


Site 3m Chamber #3 Polarization: *Vertical* Temperature: 24 C  
 Limit: (RE)FCC PART 15.407 Power: AC 120V/60Hz Humidity: 53 %  
 Mode:11A 5180  
 Note:

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	*	31.9400	41.49	-15.81	25.68	40.00	-14.32	QP		
2		100.8100	39.01	-14.02	24.99	43.50	-18.51	QP		
3		145.4300	41.50	-17.95	23.55	43.50	-19.95	QP		
4		269.5900	34.56	-12.69	21.87	46.00	-24.13	QP		
5		326.8200	36.83	-13.15	23.68	46.00	-22.32	QP		
6		402.4800	30.97	-8.93	22.04	46.00	-23.96	QP		

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

Operator: KK

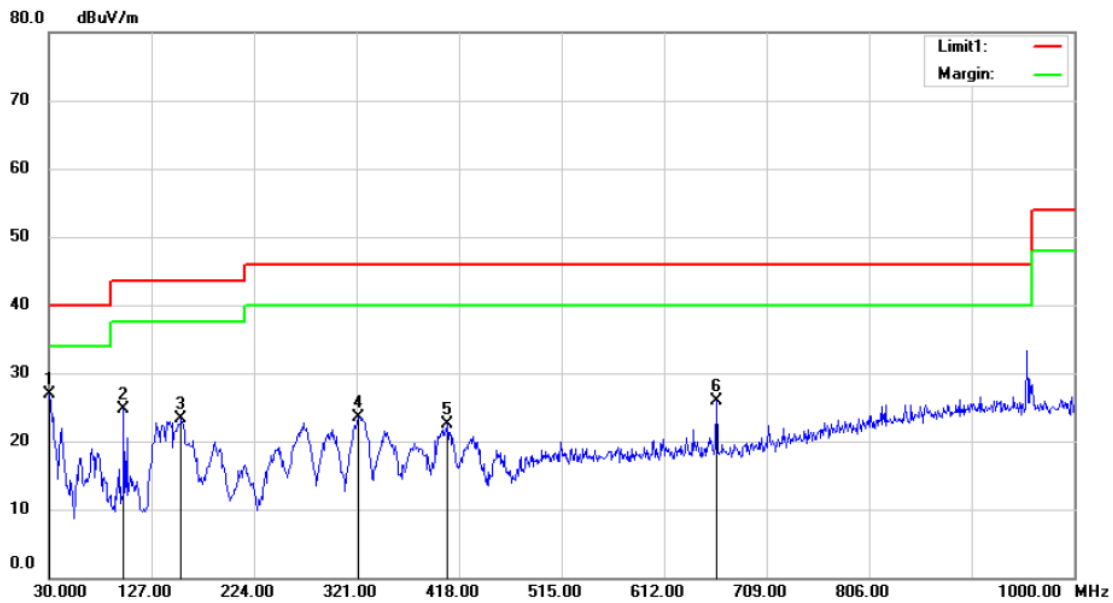


Site 3m Chamber #3 Polarization: *Horizontal* Temperature: 24 C  
 Limit: (RE)FCC PART 15.407 Power: AC 120V/60Hz Humidity: 53 %  
 Mode: 11A 5220  
 Note:

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		187.1400	42.00	-17.77	24.23	43.50	-19.27			QP
2		274.4400	38.36	-12.63	25.73	46.00	-20.27			QP
3		294.8100	40.11	-13.50	26.61	46.00	-19.39			QP
4	*	322.9400	41.30	-13.35	27.95	46.00	-18.05			QP
5		376.2900	34.72	-10.13	24.59	46.00	-21.41			QP
6		400.5400	31.27	-8.89	22.38	46.00	-23.62			QP

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

Operator: KK

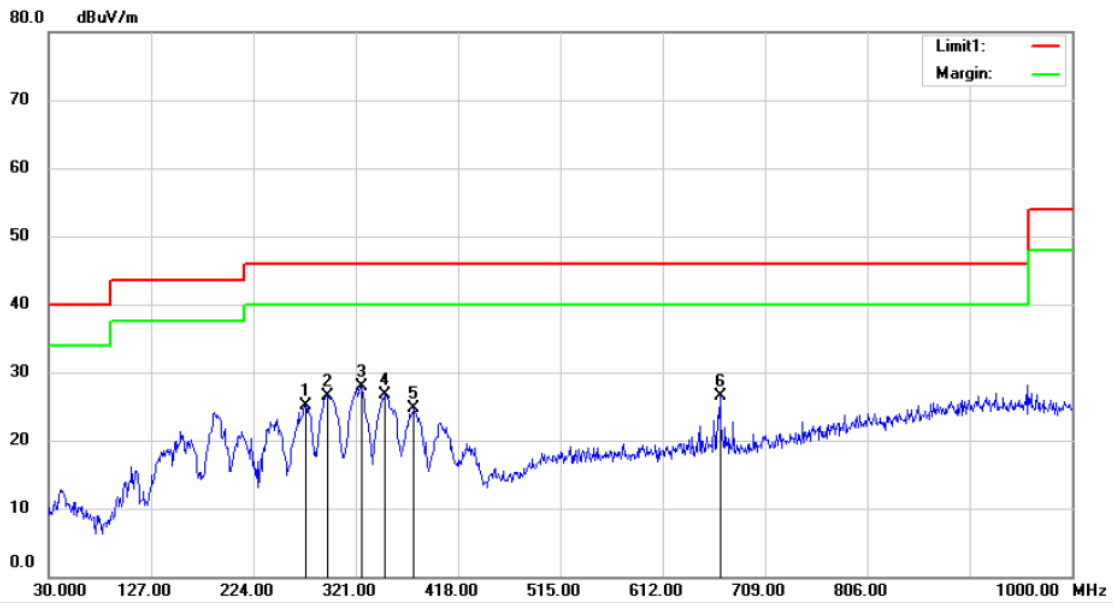


Site 3m Chamber #3      Polarization: *Vertical*      Temperature: 24 C  
 Limit: (RE)FCC PART 15.407      Power: AC 120V/60Hz      Humidity: 53 %  
 Mode:11A 5220  
 Note:

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	*	30.9700	43.05	-16.13	26.92	40.00	-13.08			QP	
2		100.8100	38.73	-14.02	24.71	43.50	-18.79			QP	
3		155.1300	41.81	-18.42	23.39	43.50	-20.11			QP	
4		322.9400	36.89	-13.35	23.54	46.00	-22.46			QP	
5		407.3300	31.63	-9.07	22.56	46.00	-23.44			QP	
6		661.4700	32.27	-6.36	25.91	46.00	-20.09			QP	

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

Operator: KK

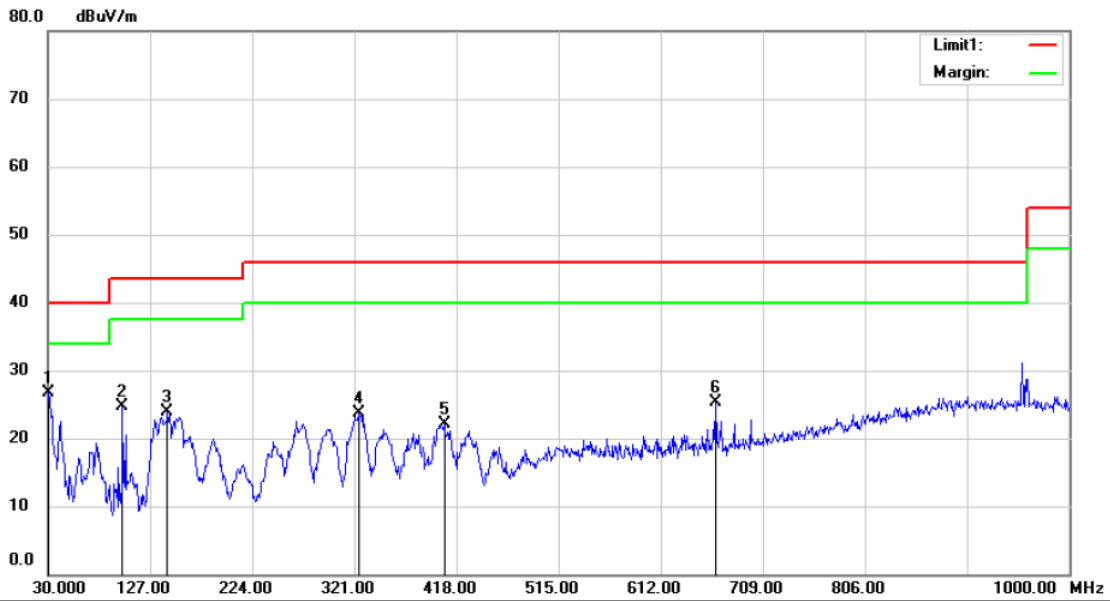


Site 3m Chamber #3      Polarization: *Horizontal*      Temperature: 24 C  
 Limit: (RE)FCC PART 15.407      Power: AC 120V/60Hz      Humidity: 53 %  
 Mode: 11A 5240  
 Note:

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		273.4700	37.82	-12.64	25.18	46.00	-20.82			QP	
2		293.8400	40.02	-13.45	26.57	46.00	-19.43			QP	
3	*	326.8200	40.98	-13.15	27.83	46.00	-18.17			QP	
4		349.1300	38.43	-11.68	26.75	46.00	-19.25			QP	
5		376.2900	34.90	-10.13	24.77	46.00	-21.23			QP	
6		666.3200	32.77	-6.33	26.44	46.00	-19.56			QP	

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

Operator: KK



Site 3m Chamber #3 Polarization: **Vertical** Temperature: 24 C  
 Limit: (RE)FCC PART 15.407 Power: AC 120V/60Hz Humidity: 53 %  
 Mode: 11A 5240  
 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	*	30.9700	42.92	-16.13	26.79	40.00	-13.21			QP
2		100.8100	38.63	-14.02	24.61	43.50	-18.89			QP
3		143.4900	41.75	-17.88	23.87	43.50	-19.63			QP
4		324.8800	36.88	-13.25	23.63	46.00	-22.37			QP
5		406.3600	31.19	-9.04	22.15	46.00	-23.85			QP
6		664.3800	31.72	-6.34	25.38	46.00	-20.62			QP

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

Operator: KK

## 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.

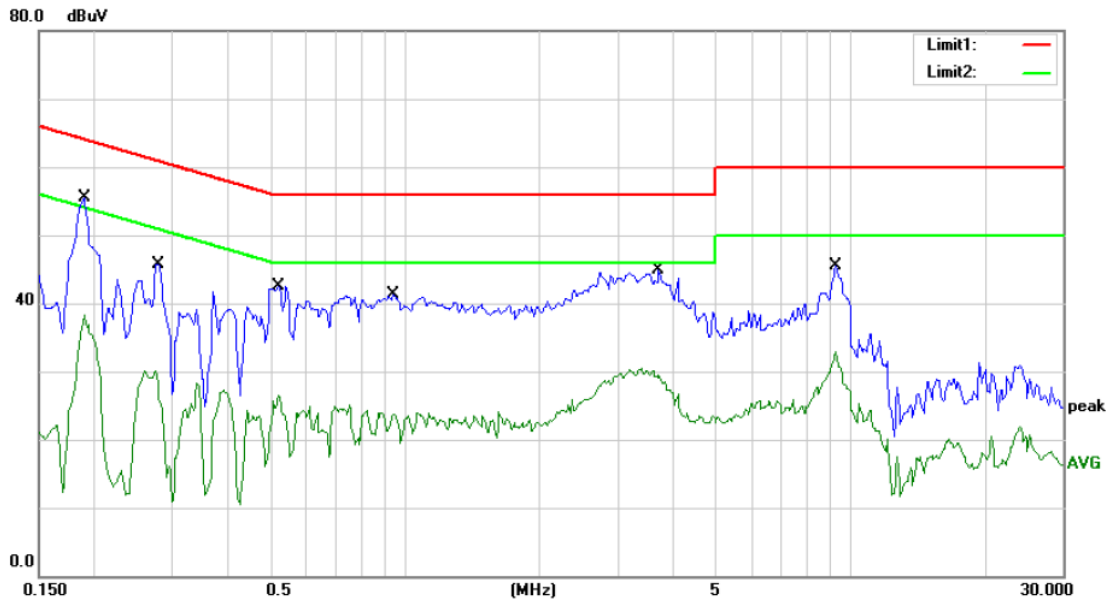
Repeat above procedures until all frequency measured were complete.

### 8.6.5 Test Results

Pass

We test the EUT at 120V and 240V, and show the worst result as bellow.

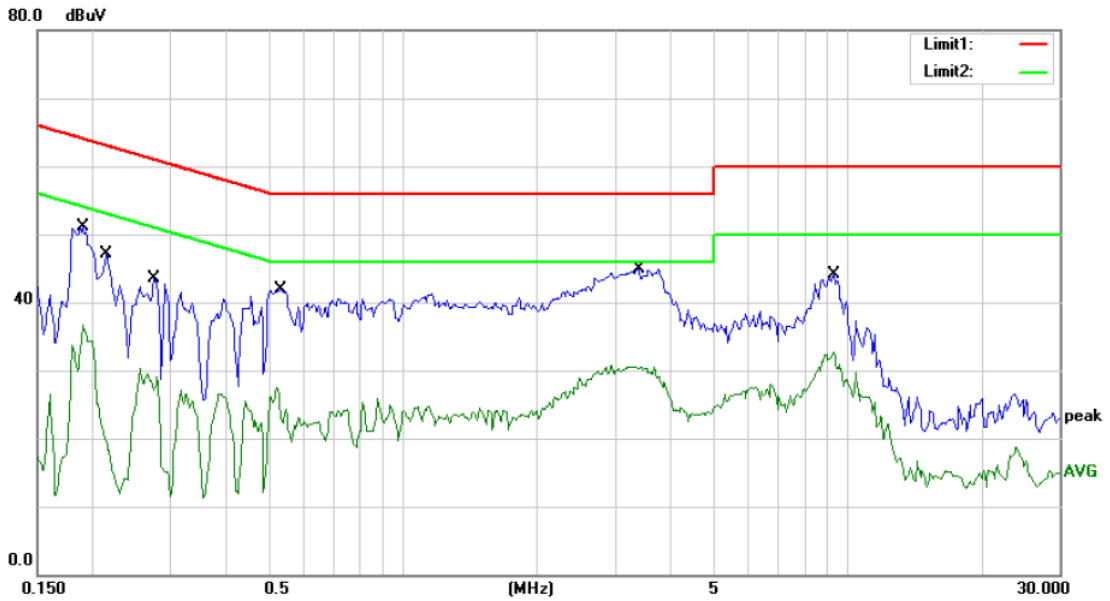




Site Conduction #1 Phase: **L1** Temperature: 22  
 Limit: (CE)FCC PART 15 class B\_QP Power: AC 120V/60Hz Humidity: 55 %  
 Mode: WIFI5 ON  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1	*	0.1900	55.46	0.00	55.46	64.04	-8.58	QP	
2		0.1900	38.39	0.00	38.39	54.04	-15.65	AVG	
3		0.2800	45.80	0.00	45.80	60.82	-15.02	QP	
4		0.2800	30.18	0.00	30.18	50.82	-20.64	AVG	
5		0.5200	42.59	0.00	42.59	56.00	-13.41	QP	
6		0.5200	28.33	0.00	28.33	46.00	-17.67	AVG	
7		0.9400	41.22	0.00	41.22	56.00	-14.78	QP	
8		0.9400	25.01	0.00	25.01	46.00	-20.99	AVG	
9		3.7100	44.89	0.00	44.89	56.00	-11.11	QP	
10		3.7100	30.55	0.00	30.55	46.00	-15.45	AVG	
11		9.2600	45.50	0.00	45.50	60.00	-14.50	QP	
12		9.2600	32.84	0.00	32.84	50.00	-17.16	AVG	

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



Site Conduction #1 Phase: **N** Temperature: 22  
 Limit: (CE)FCC PART 15 class B\_QP Power: AC 120V/60Hz Humidity: 55 %  
 Mode: WIFI5 ON  
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over	Detector	Comment
		MHz	dBuV	dB	dBuV	dBuV	dB		
1		0.1900	51.13	0.00	51.13	64.04	-12.91	QP	
2		0.1900	36.76	0.00	36.76	54.04	-17.28	AVG	
3		0.2150	47.02	0.00	47.02	63.01	-15.99	QP	
4		0.2150	25.06	0.00	25.06	53.01	-27.95	AVG	
5		0.2750	43.46	0.00	43.46	60.97	-17.51	QP	
6		0.2750	29.49	0.00	29.49	50.97	-21.48	AVG	
7		0.5300	41.84	0.00	41.84	56.00	-14.16	QP	
8		0.5300	27.58	0.00	27.58	46.00	-18.42	AVG	
9	*	3.3850	44.86	0.00	44.86	56.00	-11.14	QP	
10		3.3850	30.56	0.00	30.56	46.00	-15.44	AVG	
11		9.3200	44.15	0.00	44.15	60.00	-15.85	QP	
12		9.3200	30.99	0.00	30.99	50.00	-19.01	AVG	

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

## 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 1 antenna: a PCB Antenna for WIFI, the gain is -2.55 dBi

- 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)

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