

Power Spectral Density		UNII Band I	
Test Model	802.11ac(VHT40) mode	Frequency(MHz)	5190
Ant0			



Ant1



Power Spectral Density		UNII Band I	
Test Model	802.11ac(VHT40) mode	Frequency(MHz)	5230
Ant0			



Ant1



Power Spectral Density		UNII Band II-A	
Test Model	802.11ac(VHT40) mode	Frequency(MHz)	5270
Ant0			



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Power Spectral Density		UNII Band II-A	
Test Model	802.11ac(VHT40) mode	Frequency(MHz)	5310
Ant0			



Ant1



Power Spectral Density		UNII Band II-C	
Test Model	802.11ac(VHT40) mode	Frequency(MHz)	5510
Ant0			



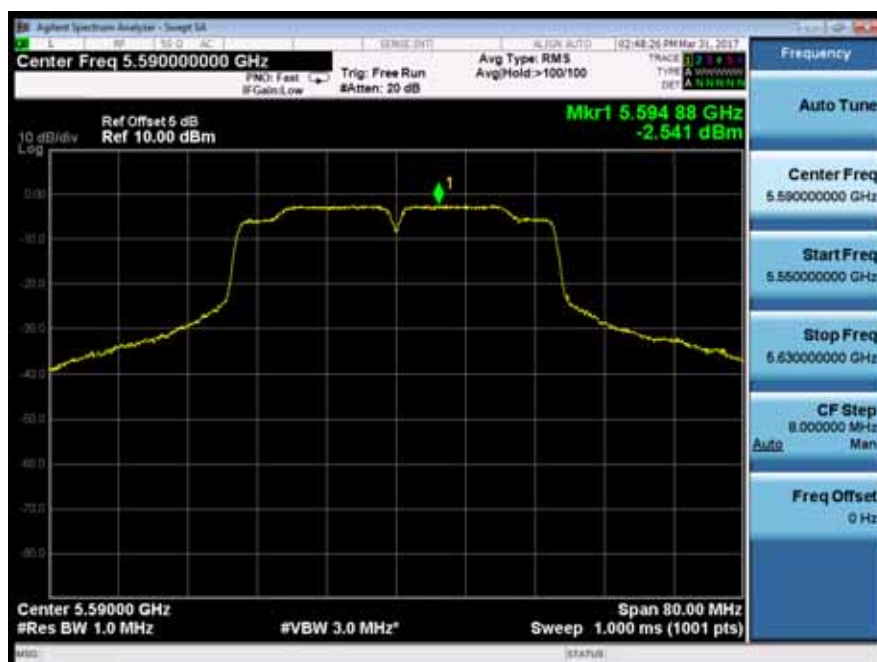
Ant1



Power Spectral Density		UNII Band II-C	
Test Model	802.11ac(VHT40) mode	Frequency(MHz)	5590
Ant0			



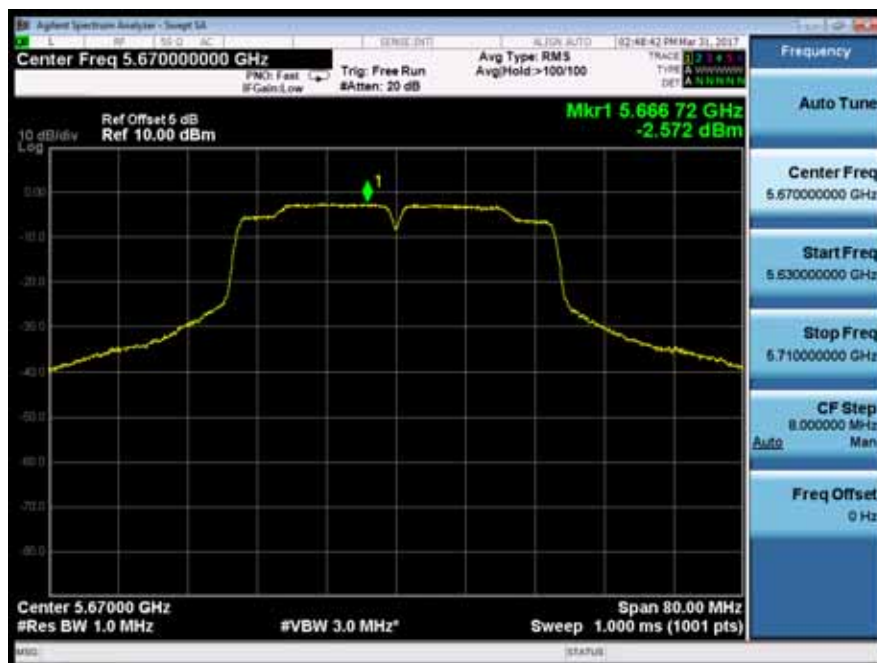
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Power Spectral Density		UNII Band II-C	
Test Model	802.11ac(VHT40) mode	Frequency(MHz)	5670
Ant0			



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Power Spectral Density	UNII Band III
Test Model 802.11ac(VHT40) mode	Frequency(MHz) 5755
Ant0	



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Power Spectral Density	UNII Band III	
Test Model	802.11ac(VHT40) mode	Frequency(MHz)
Ant0		5795



Ant1



Power Spectral Density	UNII Band I	
Test Model	802.11ac(VHT80) mode	Frequency(MHz)
Ant0		5210



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Power Spectral Density		UNII Band II-A	
Test Model	802.11ac(VHT80) mode	Frequency(MHz)	5290
Ant0			



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Power Spectral Density		UNII Band II-C	
Test Model	802.11ac(VHT80) mode	Frequency(MHz)	5530
Ant0			



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Power Spectral Density		UNII Band II-C	
Test Model	802.11ac(VHT80) mode	Frequency(MHz)	5610
Ant0			



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Power Spectral Density	UNII Band III
Test Model 802.11ac(VHT80) mode	Frequency(MHz) 5775
Ant0	



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8.4 FREQUENCY STABILITY

8.4.1 Applicable Standard

According to FCC Part 15.407(g)
ANSI C63.10 Section 6.8

8.4.2 Conformance 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 users manual.

8.4.3 Test Configuration

Test according to clause 6.1 radio frequency test setup

8.4.4 Test Procedure

The RF output of EUT was connected to the spectrum analyzer by RF cable and attenuator. The path loss was compensated to the results for each measurement.

Set to the maximum power setting and enable the EUT transmit continuously

Set RBW = 10 kHz.

Set the video bandwidth (VBW) =30 kHz.

Set Span= Entire absence of modulation emissions bandwidth

Set Detector = Peak.

Set Trace mode = max hold.

Set Sweep = auto couple.

Allow the trace to stabilize.

The test extreme voltage is to change the primary supply voltage from 85 to 115 percent of the nominal value.

Beginning at each temperature level specified in user manual , the frequency shall be measured within one minute after application of primary power to the transmitter and at intervals of no more than one minute thereafter until ten minutes have elapsed or until sufficient measurements are obtained to indicate clearly that the frequency has stabilized within the applicable tolerance, whichever time period is greater. During each test, the ambient temperature shall not be allowed to rise more than 10° centigrade above the respective beginning ambient temperature level

Measure and record the results in the test report.

8.4.5 Test Results

802.11a mode		5180		
Temperature :	--	Test Date :	March 31, 2017	
Humidity :	65 %	Test By:	King Kong	
Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5179.969189	-30.811	Pass
	-10	5179.969197	-30.803	Pass
	0	5179.969441	-30.559	Pass
	10	5179.969545	-30.455	Pass
	20	5179.969537	-30.463	Pass
	30	5179.969298	-30.702	Pass
	40	5179.969998	-30.002	Pass
	50	5179.969587	-30.413	Pass
85% Vnom	20	5179.969536	-30.464	Pass
115% Vnom	20	5179.969298	-30.702	Pass

802.11a mode		5200		
Temperature :	--	Test Date :	March 31, 2017	
Humidity :	65 %	Test By:	King Kong	
Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5199.961073	-38.927	Pass
	-10	5199.961433	-38.567	Pass
	0	5199.961594	-38.406	Pass
	10	5199.961551	-38.449	Pass
	20	5200.038748	38.748	Pass
	30	5199.961536	-38.464	Pass
	40	5199.961865	-38.135	Pass
	50	5199.961727	-38.273	Pass
85% Vnom	20	5199.961098	-38.902	Pass
115% Vnom	20	5199.961060	-38.940	Pass

802.11a mode		5240		
Temperature :	--	Test Date :	March 31, 2017	
Humidity :	65 %	Test By:	King Kong	
Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5239.977920	-22.080	Pass
	-10	5239.977915	-22.085	Pass
	0	5239.977618	-22.382	Pass
	10	5239.977864	-22.136	Pass
	20	5239.977658	-22.342	Pass
	30	5239.977608	-22.392	Pass
	40	5239.977298	-22.702	Pass
	50	5239.977998	-22.002	Pass
85% Vnom	20	5239.977722	-22.278	Pass
115% Vnom	20	5239.977618	-22.382	Pass

802.11a mode	5260
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5259.973952	-26.048	Pass
	-10	5259.973669	-26.331	Pass
	0	5259.973618	-26.382	Pass
	10	5259.973878	-26.122	Pass
	20	5259.973718	-26.282	Pass
	30	5259.973521	-26.479	Pass
	40	5259.973172	-26.828	Pass
	50	5259.973669	-26.331	Pass
85% Vnom	20	5259.973613	-26.387	Pass
115% Vnom	20	5259.973865	-26.135	Pass

802.11a mode	5280
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5279.993957	-6.043	Pass
	-10	5279.993965	-6.035	Pass
	0	5279.994011	-5.989	Pass
	10	5279.993621	-6.379	Pass
	20	5279.993918	-6.082	Pass
	30	5279.993503	-6.497	Pass
	40	5279.993820	-6.180	Pass
	50	5279.993979	-6.021	Pass
85% Vnom	20	5279.993622	-6.378	Pass
115% Vnom	20	5279.993765	-6.235	Pass

802.11a mode	5320
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5319.949725	-50.275	Pass
	-10	5319.949774	-50.226	Pass
	0	5319.949859	-50.141	Pass
	10	5319.949678	-50.322	Pass
	20	5319.949654	-50.346	Pass
	30	5319.949536	-50.464	Pass
	40	5319.949381	-50.619	Pass
	50	5319.949859	-50.141	Pass
85% Vnom	20	5319.949555	-50.445	Pass
115% Vnom	20	5319.949554	-50.446	Pass

802.11a mode	5500
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5499.964962	-35.038	Pass
	-10	5499.964878	-35.122	Pass
	0	5499.964854	-35.146	Pass
	10	5499.964919	-35.081	Pass
	20	5499.964825	-35.175	Pass
	30	5499.964873	-35.127	Pass
	40	5499.964622	-35.378	Pass
	50	5499.964281	-35.719	Pass
85% Vnom	20	5499.964854	-35.146	Pass
115% Vnom	20	5499.964767	-35.233	Pass

802.11a mode	5600
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5600.021058	21.058	Pass
	-10	5600.021087	21.087	Pass
	0	5600.021381	21.381	Pass
	10	5600.021444	21.444	Pass
	20	5600.021543	21.543	Pass
	30	5600.021388	21.388	Pass
	40	5600.021383	21.383	Pass
	50	5600.021282	21.282	Pass
85% Vnom	20	5600.021425	21.425	Pass
115% Vnom	20	5600.021623	21.623	Pass

802.11a mode	5700
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5699.956249	-43.751	Pass
	-10	5699.956769	-43.231	Pass
	0	5699.956854	-43.146	Pass
	10	5699.956834	-43.166	Pass
	20	5699.956540	-43.460	Pass
	30	5699.956600	-43.400	Pass
	40	5699.956567	-43.433	Pass
	50	5699.956261	-43.739	Pass
85% Vnom	20	5699.956481	-43.519	Pass
115% Vnom	20	5699.956071	-43.929	Pass

802.11a mode	5745
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5744.986224	-13.776	Pass
	-10	5744.986171	-13.829	Pass
	0	5744.986552	-13.448	Pass
	10	5744.986101	-13.899	Pass
	20	5744.986297	-13.703	Pass
	30	5744.986171	-13.829	Pass
	40	5744.986060	-13.940	Pass
	50	5744.986531	-13.469	Pass
85% Vnom	20	5744.986600	-13.400	Pass
115% Vnom	20	5744.986062	-13.938	Pass

802.11a mode	5785
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5784.991175	-8.825	Pass
	-10	5784.991867	-8.133	Pass
	0	5784.991755	-8.245	Pass
	10	5784.991298	-8.702	Pass
	20	5784.991398	-8.602	Pass
	30	5784.991867	-8.133	Pass
	40	5784.991331	-8.669	Pass
	50	5784.991860	-8.140	Pass
85% Vnom	20	5784.991887	-8.113	Pass
115% Vnom	20	5784.991863	-8.137	Pass

802.11a mode	5825
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5824.982608	-17.392	Pass
	-10	5824.982471	-17.529	Pass
	0	5824.982861	-17.139	Pass
	10	5824.982474	-17.526	Pass
	20	5824.982771	-17.229	Pass
	30	5824.982532	-17.468	Pass
	40	5824.982478	-17.522	Pass
	50	5824.982914	-17.086	Pass
85% Vnom	20	5824.983008	-16.992	Pass
115% Vnom	20	5824.982968	-17.032	Pass

802.11n(VHT20) mode	5180
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5180.001142	1.142	Pass
	-10	5180.001142	1.142	Pass
	0	5180.001148	1.148	Pass
	10	5180.001170	1.170	Pass
	20	5180.001179	1.179	Pass
	30	5180.001549	1.549	Pass
	40	5180.001588	1.588	Pass
	50	5180.001549	1.549	Pass
85% Vnom	20	5180.001548	1.548	Pass
115% Vnom	20	5180.001605	1.605	Pass

802.11n(VHT20) mode	5200
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5199.975995	-24.005	Pass
	-10	5199.975659	-24.341	Pass
	0	5199.975474	-24.526	Pass
	10	5199.975841	-24.159	Pass
	20	5199.975302	-24.698	Pass
	30	5199.975481	-24.519	Pass
	40	5199.975203	-24.797	Pass
	50	5199.975863	-24.137	Pass
85% Vnom	20	5199.975171	-24.829	Pass
115% Vnom	20	5199.976008	-23.992	Pass

802.11n(VHT20) mode	5240
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5239.981967	-18.033	Pass
	-10	5239.981567	-18.433	Pass
	0	5239.981573	-18.427	Pass
	10	5239.981571	-18.429	Pass
	20	5239.981802	-18.198	Pass
	30	5239.981513	-18.487	Pass
	40	5239.981475	-18.525	Pass
	50	5239.981571	-18.429	Pass
85% Vnom	20	5239.981878	-18.122	Pass
115% Vnom	20	5239.981482	-18.518	Pass

802.11n(VHT20) mode	5260
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5259.998023	-1.977	Pass
	-10	5259.997865	-2.135	Pass
	0	5259.997434	-2.566	Pass
	10	5259.997541	-2.459	Pass
	20	5259.997425	-2.575	Pass
	30	5259.997534	-2.466	Pass
	40	5259.997854	-2.146	Pass
	50	5259.998008	-1.992	Pass
85% Vnom	20	5259.997954	-2.046	Pass
115% Vnom	20	5259.997333	-2.667	Pass

802.11n(VHT20) mode	5280
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5279.980393	-19.607	Pass
	-10	5279.980171	-19.829	Pass
	0	5279.980603	-19.397	Pass
	10	5279.980531	-19.469	Pass
	20	5279.980541	-19.459	Pass
	30	5279.980595	-19.405	Pass
	40	5279.980265	-19.735	Pass
	50	5279.980163	-19.837	Pass
85% Vnom	20	5279.980654	-19.346	Pass
115% Vnom	20	5279.980541	-19.459	Pass

802.11n(VHT20) mode	5320
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5319.981454	-18.546	Pass
	-10	5319.981541	-18.459	Pass
	0	5319.981331	-18.669	Pass
	10	5319.981603	-18.397	Pass
	20	5319.981388	-18.612	Pass
	30	5319.981441	-18.559	Pass
	40	5319.981776	-18.224	Pass
	50	5319.981487	-18.513	Pass
85% Vnom	20	5319.981472	-18.528	Pass
115% Vnom	20	5319.981758	-18.242	Pass

802.11n(VHT20) mode	5500
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5499.990283	-9.717	Pass
	-10	5499.990503	-9.497	Pass
	0	5499.990654	-9.346	Pass
	10	5499.990865	-9.135	Pass
	20	5499.990887	-9.113	Pass
	30	5499.990865	-9.135	Pass
	40	5499.990658	-9.342	Pass
	50	5499.990873	-9.127	Pass
85% Vnom	20	5499.990903	-9.097	Pass
115% Vnom	20	5499.990765	-9.235	Pass

802.11n(VHT20) mode	5600
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5599.993048	-6.952	Pass
	-10	5599.993765	-6.235	Pass
	0	5599.993664	-6.336	Pass
	10	5599.993871	-6.129	Pass
	20	5599.993665	-6.335	Pass
	30	5599.994000	-6.000	Pass
	40	5599.993495	-6.505	Pass
	50	5599.993948	-6.052	Pass
85% Vnom	20	5599.993671	-6.329	Pass
115% Vnom	20	5599.993881	-6.119	Pass

802.11n(VHT20) mode	5700
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5699.982723	-17.277	Pass
	-10	5699.982765	-17.235	Pass
	0	5699.982618	-17.382	Pass
	10	5699.982481	-17.519	Pass
	20	5699.982502	-17.498	Pass
	30	5699.982878	-17.122	Pass
	40	5699.982969	-17.031	Pass
	50	5699.982969	-17.031	Pass
85% Vnom	20	5699.982605	-17.395	Pass
115% Vnom	20	5699.982969	-17.031	Pass

802.11n(VHT20) mode	5745
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5744.980671	-19.329	Pass
	-10	5744.980878	-19.122	Pass
	0	5744.980864	-19.136	Pass
	10	5744.980500	-19.500	Pass
	20	5744.980867	-19.133	Pass
	30	5744.980565	-19.435	Pass
	40	5744.980534	-19.466	Pass
	50	5744.980507	-19.493	Pass
85% Vnom	20	5744.980431	-19.569	Pass
115% Vnom	20	5744.980458	-19.542	Pass

802.11n(VHT20) mode	5785
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5784.988785	-11.215	Pass
	-10	5784.988861	-11.139	Pass
	0	5784.988477	-11.523	Pass
	10	5784.988462	-11.538	Pass
	20	5784.988441	-11.559	Pass
	30	5784.988481	-11.519	Pass
	40	5784.988461	-11.539	Pass
	50	5784.988481	-11.519	Pass
85% Vnom	20	5784.988180	-11.820	Pass
115% Vnom	20	5784.988509	-11.491	Pass

802.11n(VHT20) mode	5825
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5824.991886	-8.114	Pass
	-10	5824.991507	-8.493	Pass
	0	5824.991877	-8.123	Pass
	10	5824.991174	-8.826	Pass
	20	5824.991497	-8.503	Pass
	30	5824.991478	-8.522	Pass
	40	5824.991067	-8.933	Pass
	50	5824.991441	-8.559	Pass
85% Vnom	20	5824.991567	-8.433	Pass
115% Vnom	20	5824.991867	-8.133	Pass

802.11ac(VHT20) mode	5180
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5179.996369	-3.631	Pass
	-10	5179.996507	-3.493	Pass
	0	5179.996507	-3.493	Pass
	10	5179.996507	-3.493	Pass
	20	5179.996507	-3.493	Pass
	30	5179.996261	-3.739	Pass
	40	5179.996174	-3.826	Pass
	50	5179.996531	-3.469	Pass
85% Vnom	20	5179.996507	-3.493	Pass
115% Vnom	20	5179.996669	-3.331	Pass

802.11ac(VHT20) mode	5200
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5199.984985	-15.015	Pass
	-10	5199.984507	-15.493	Pass
	0	5199.984661	-15.339	Pass
	10	5199.984174	-15.826	Pass
	20	5199.984174	-15.826	Pass
	30	5199.984477	-15.523	Pass
	40	5199.984563	-15.437	Pass
	50	5199.984507	-15.493	Pass
85% Vnom	20	5199.984174	-15.826	Pass
115% Vnom	20	5199.984369	-15.631	Pass

802.11ac(VHT20) mode	5240
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5240.002195	2.195	Pass
	-10	5240.002569	2.569	Pass
	0	5240.002539	2.539	Pass
	10	5240.002539	2.539	Pass
	20	5240.002628	2.628	Pass
	30	5240.002079	2.079	Pass
	40	5240.002079	2.079	Pass
	50	5240.002584	2.584	Pass
85% Vnom	20	5240.002717	2.717	Pass
115% Vnom	20	5240.002863	2.863	Pass

802.11ac(VHT20) mode

5260

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5260.010732	10.732	Pass
	-10	5260.010872	10.872	Pass
	0	5260.010377	10.377	Pass
	10	5260.010569	10.569	Pass
	20	5260.010569	10.569	Pass
	30	5260.010677	10.677	Pass
	40	5260.010569	10.569	Pass
	50	5260.010408	10.408	Pass
85% Vnom	20	5260.010484	10.484	Pass
115% Vnom	20	5260.010606	10.606	Pass

802.11ac(VHT20) mode

5280

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5280.013832	13.832	Pass
	-10	5280.013569	13.569	Pass
	0	5280.013584	13.584	Pass
	10	5280.013913	13.913	Pass
	20	5280.013863	13.863	Pass
	30	5280.013079	13.079	Pass
	40	5280.013439	13.439	Pass
	50	5280.013837	13.837	Pass
85% Vnom	20	5280.013169	13.169	Pass
115% Vnom	20	5280.013436	13.436	Pass

802.11ac(VHT20) mode

5320

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5320.002269	2.269	Pass
	-10	5320.002179	2.179	Pass
	0	5320.002079	2.079	Pass
	10	5320.002079	2.079	Pass
	20	5320.002443	2.443	Pass
	30	5320.002603	2.603	Pass
	40	5320.002543	2.543	Pass
	50	5320.002519	2.519	Pass
85% Vnom	20	5320.002512	2.512	Pass
115% Vnom	20	5320.002872	2.872	Pass

802.11ac(VHT20) mode

5500

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5500.004144	4.144	Pass
	-10	5500.004183	4.183	Pass
	0	5500.004209	4.209	Pass
	10	5500.004975	4.975	Pass
	20	5500.004664	4.664	Pass
	30	5500.004169	4.169	Pass
	40	5500.004088	4.088	Pass
	50	5500.004238	4.238	Pass
85% Vnom	20	5500.004179	4.179	Pass
115% Vnom	20	5500.004915	4.915	Pass

802.11ac(VHT20) mode

5600

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5599.996999	-3.001	Pass
	-10	5599.996514	-3.486	Pass
	0	5599.996495	-3.505	Pass
	10	5599.996605	-3.395	Pass
	20	5599.996894	-3.106	Pass
	30	5599.996833	-3.167	Pass
	40	5599.996174	-3.826	Pass
	50	5599.996875	-3.125	Pass
85% Vnom	20	5599.996069	-3.931	Pass
115% Vnom	20	5599.996174	-3.826	Pass

802.11ac(VHT20) mode

5700

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5699.982733	-17.267	Pass
	-10	5699.982834	-17.166	Pass
	0	5699.982834	-17.166	Pass
	10	5699.982534	-17.466	Pass
	20	5699.982964	-17.036	Pass
	30	5699.982834	-17.166	Pass
	40	5699.982843	-17.157	Pass
	50	5699.982183	-17.817	Pass
85% Vnom	20	5699.982522	-17.478	Pass
115% Vnom	20	5699.983009	-16.991	Pass

802.11ac(VHT20) mode

5745

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5744.967133	-32.867	Pass
	-10	5744.967833	-32.167	Pass
	0	5744.967098	-32.902	Pass
	10	5744.967174	-32.826	Pass
	20	5744.967123	-32.877	Pass
	30	5744.967174	-32.826	Pass
	40	5744.967997	-32.003	Pass
	50	5744.967174	-32.826	Pass
85% Vnom	20	5744.967238	-32.762	Pass
115% Vnom	20	5744.967133	-32.867	Pass

802.11ac(VHT20) mode

5785

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5784.994133	-5.867	Pass
	-10	5784.994534	-5.466	Pass
	0	5784.994854	-5.146	Pass
	10	5784.994787	-5.213	Pass
	20	5784.994859	-5.141	Pass
	30	5784.994918	-5.082	Pass
	40	5784.994957	-5.043	Pass
	50	5784.994525	-5.475	Pass
85% Vnom	20	5784.994392	-5.608	Pass
115% Vnom	20	5784.994899	-5.101	Pass

802.11ac(VHT20) mode

5825

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5824.987460	-12.540	Pass
	-10	5824.987965	-12.035	Pass
	0	5824.987658	-12.342	Pass
	10	5824.987761	-12.239	Pass
	20	5824.987654	-12.346	Pass
	30	5824.987475	-12.525	Pass
	40	5824.987998	-12.002	Pass
	50	5824.987655	-12.345	Pass
85% Vnom	20	5824.987412	-12.588	Pass
115% Vnom	20	5824.987474	-12.526	Pass

802.11n(VHT40) mode	5190
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5189.975117	-24.883	Pass
	-10	5189.976000	-24.000	Pass
	0	5189.975992	-24.008	Pass
	10	5189.975954	-24.046	Pass
	20	5189.975383	-24.617	Pass
	30	5189.975663	-24.337	Pass
	40	5189.975708	-24.292	Pass
	50	5189.975658	-24.342	Pass
85% Vnom	20	5189.975861	-24.139	Pass
115% Vnom	20	5189.975531	-24.469	Pass

802.11n(VHT40) mode	5230
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5229.972374	-27.626	Pass
	-10	5229.972717	-27.283	Pass
	0	5229.972622	-27.378	Pass
	10	5229.972617	-27.383	Pass
	20	5229.972787	-27.213	Pass
	30	5229.972903	-27.097	Pass
	40	5229.972398	-27.602	Pass
	50	5229.972460	-27.540	Pass
85% Vnom	20	5229.972878	-27.122	Pass
115% Vnom	20	5229.972864	-27.136	Pass

802.11n(VHT40) mode	5270
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5270.025736	25.736	Pass
	-10	5270.025739	25.739	Pass
	0	5270.025339	25.339	Pass
	10	5270.025192	25.192	Pass
	20	5270.025371	25.371	Pass
	30	5270.025392	25.392	Pass
	40	5270.025475	25.475	Pass
	50	5270.025036	25.036	Pass
85% Vnom	20	5270.025426	25.426	Pass
115% Vnom	20	5270.025179	25.179	Pass

802.11n(VHT40) mode	5310
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5309.982565	-17.435	Pass
	-10	5309.982478	-17.522	Pass
	0	5309.982772	-17.228	Pass
	10	5309.982394	-17.606	Pass
	20	5309.982967	-17.033	Pass
	30	5309.982538	-17.462	Pass
	40	5309.982071	-17.929	Pass
	50	5309.982443	-17.557	Pass
85% Vnom	20	5309.982972	-17.028	Pass
115% Vnom	20	5309.982331	-17.669	Pass

802.11n(VHT40) mode	5510
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5510.009987	9.987	Pass
	-10	5510.009648	9.648	Pass
	0	5510.009392	9.392	Pass
	10	5510.009615	9.615	Pass
	20	5510.009571	9.571	Pass
	30	5510.009735	9.735	Pass
	40	5510.009648	9.648	Pass
	50	5510.009176	9.176	Pass
85% Vnom	20	5510.009383	9.383	Pass
115% Vnom	20	5510.009569	9.569	Pass

802.11n(VHT40) mode	5590
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5590.003482	3.482	Pass
	-10	5590.003288	3.288	Pass
	0	5590.003176	3.176	Pass
	10	5590.003048	3.048	Pass
	20	5590.003279	3.279	Pass
	30	5590.003179	3.179	Pass
	40	5590.003212	3.212	Pass
	50	5590.003442	3.442	Pass
85% Vnom	20	5590.003179	3.179	Pass
115% Vnom	20	5590.003179	3.179	Pass

802.11n(VHT40) mode	5670
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5669.980758	-19.242	Pass
	-10	5669.980833	-19.167	Pass
	0	5669.980834	-19.166	Pass
	10	5669.980865	-19.135	Pass
	20	5669.980873	-19.127	Pass
	30	5669.980868	-19.132	Pass
	40	5669.980883	-19.117	Pass
	50	5669.980867	-19.133	Pass
85% Vnom	20	5669.980270	-19.730	Pass
115% Vnom	20	5669.980639	-19.361	Pass

802.11n(VHT40) mode	5755
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5754.994754	-5.246	Pass
	-10	5754.994854	-5.146	Pass
	0	5754.994863	-5.137	Pass
	10	5754.994658	-5.342	Pass
	20	5754.994870	-5.130	Pass
	30	5754.994534	-5.466	Pass
	40	5754.994898	-5.102	Pass
	50	5754.994788	-5.212	Pass
85% Vnom	20	5754.994898	-5.102	Pass
115% Vnom	20	5754.994873	-5.127	Pass

802.11n(VHT40) mode	5795
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5794.985750	-14.250	Pass
	-10	5794.985754	-14.246	Pass
	0	5794.985666	-14.334	Pass
	10	5794.985865	-14.135	Pass
	20	5794.985875	-14.125	Pass
	30	5794.985967	-14.033	Pass
	40	5794.985478	-14.522	Pass
	50	5794.985442	-14.558	Pass
85% Vnom	20	5794.985918	-14.082	Pass
115% Vnom	20	5794.985998	-14.002	Pass

802.11ac(VHT40) mode

5190

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5189.981015	-18.985	Pass
	-10	5189.980673	-19.327	Pass
	0	5189.980560	-19.440	Pass
	10	5189.980873	-19.127	Pass
	20	5189.980867	-19.133	Pass
	30	5189.980887	-19.113	Pass
	40	5189.980267	-19.733	Pass
	50	5189.980871	-19.129	Pass
85% Vnom	20	5189.980292	-19.708	Pass
115% Vnom	20	5189.980830	-19.170	Pass

802.11ac(VHT40) mode

5230

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5229.984792	-15.208	Pass
	-10	5229.984369	-15.631	Pass
	0	5229.984864	-15.136	Pass
	10	5229.984540	-15.460	Pass
	20	5229.984573	-15.427	Pass
	30	5229.984241	-15.759	Pass
	40	5229.984871	-15.129	Pass
	50	5229.984975	-15.025	Pass
85% Vnom	20	5229.984867	-15.133	Pass
115% Vnom	20	5229.984875	-15.125	Pass

802.11ac(VHT40) mode

5270

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5270.021180	21.180	Pass
	-10	5270.021616	21.616	Pass
	0	5270.021278	21.278	Pass
	10	5270.021276	21.276	Pass
	20	5270.021505	21.505	Pass
	30	5270.021388	21.388	Pass
	40	5270.021176	21.176	Pass
	50	5270.021073	21.073	Pass
85% Vnom	20	5270.021545	21.545	Pass
115% Vnom	20	5270.021173	21.173	Pass

802.11ac(VHT40) mode

5310

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5309.992073	-7.927	Pass
	-10	5309.992392	-7.608	Pass
	0	5309.992754	-7.246	Pass
	10	5309.992475	-7.525	Pass
	20	5309.992967	-7.033	Pass
	30	5309.992764	-7.236	Pass
	40	5309.992527	-7.473	Pass
	50	5309.992824	-7.176	Pass
85% Vnom	20	5309.992854	-7.146	Pass
115% Vnom	20	5309.992171	-7.829	Pass

802.11ac(VHT40) mode

5510

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5509.984212	-15.788	Pass
	-10	5509.984758	-15.242	Pass
	0	5509.984534	-15.466	Pass
	10	5509.984669	-15.331	Pass
	20	5509.984754	-15.246	Pass
	30	5509.985000	-15.000	Pass
	40	5509.984775	-15.225	Pass
	50	5509.984703	-15.297	Pass
85% Vnom	20	5509.984769	-15.231	Pass
115% Vnom	20	5509.984573	-15.427	Pass

802.11ac(VHT40) mode

5590

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5589.975110	-24.890	Pass
	-10	5589.975867	-24.133	Pass
	0	5589.975941	-24.059	Pass
	10	5589.975093	-24.907	Pass
	20	5589.975804	-24.196	Pass
	30	5589.975533	-24.467	Pass
	40	5589.975538	-24.462	Pass
	50	5589.975543	-24.457	Pass
85% Vnom	20	5589.975568	-24.432	Pass
115% Vnom	20	5589.975174	-24.826	Pass

802.11ac(VHT40) mode

5670

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5669.984865	-15.135	Pass
	-10	5669.984537	-15.463	Pass
	0	5669.984174	-15.826	Pass
	10	5669.984209	-15.791	Pass
	20	5669.984518	-15.482	Pass
	30	5669.984618	-15.382	Pass
	40	5669.984174	-15.826	Pass
	50	5669.984174	-15.826	Pass
85% Vnom	20	5669.984667	-15.333	Pass
115% Vnom	20	5669.984534	-15.466	Pass

802.11ac(VHT40) mode

5755

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5754.983534	-16.466	Pass
	-10	5754.983865	-16.135	Pass
	0	5754.984588	-15.412	Pass
	10	5754.983793	-16.207	Pass
	20	5754.983665	-16.335	Pass
	30	5754.983767	-16.233	Pass
	40	5754.983270	-16.730	Pass
	50	5754.983537	-16.463	Pass
85% Vnom	20	5754.983131	-16.869	Pass
115% Vnom	20	5754.983721	-16.279	Pass

802.11ac(VHT40) mode

5795

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5794.974859	-25.141	Pass
	-10	5794.974873	-25.127	Pass
	0	5794.974267	-25.733	Pass
	10	5794.974865	-25.135	Pass
	20	5794.974833	-25.167	Pass
	30	5794.974378	-25.622	Pass
	40	5794.974541	-25.459	Pass
	50	5794.974921	-25.079	Pass
85% Vnom	20	5794.974807	-25.193	Pass
115% Vnom	20	5794.974865	-25.135	Pass

802.11ac(VHT80) mode

5210

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5209.969865	-30.135	Pass
	-10	5209.969543	-30.457	Pass
	0	5209.969475	-30.525	Pass
	10	5209.969543	-30.457	Pass
	20	5209.969475	-30.525	Pass
	30	5209.969543	-30.457	Pass
	40	5209.969534	-30.466	Pass
	50	5209.969534	-30.466	Pass
85% Vnom	20	5209.969174	-30.826	Pass
115% Vnom	20	5209.969763	-30.237	Pass

802.11ac(VHT80) mode

5290

Temperature : --

Test Date :

March 31, 2017

Humidity : 65 %

Test By:

King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5290.038468	38.468	Pass
	-10	5290.038288	38.288	Pass
	0	5290.038621	38.621	Pass
	10	5290.038286	38.286	Pass
	20	5290.038264	38.264	Pass
	30	5290.038179	38.179	Pass
	40	5290.038182	38.182	Pass
	50	5290.038625	38.625	Pass
85% Vnom	20	5290.038623	38.623	Pass
115% Vnom	20	5290.038572	38.572	Pass

802.11ac(VHT80) mode	5530
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5529.959860	-40.140	Pass
	-10	5529.959833	-40.167	Pass
	0	5529.959433	-40.567	Pass
	10	5529.959764	-40.236	Pass
	20	5529.959460	-40.540	Pass
	30	5529.959565	-40.435	Pass
	40	5529.959542	-40.458	Pass
	50	5529.959513	-40.487	Pass
85% Vnom	20	5529.959867	-40.133	Pass
115% Vnom	20	5529.959425	-40.575	Pass

802.11ac(VHT80) mode	5610
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5609.969538	-30.462	Pass
	-10	5609.969567	-30.433	Pass
	0	5609.969758	-30.242	Pass
	10	5609.969338	-30.662	Pass
	20	5609.969503	-30.497	Pass
	30	5609.969433	-30.567	Pass
	40	5609.969912	-30.088	Pass
	50	5609.969373	-30.627	Pass
85% Vnom	20	5609.969454	-30.546	Pass
115% Vnom	20	5609.969475	-30.525	Pass

802.11ac(VHT80) mode	5775
Temperature : --	Test Date : March 31, 2017
Humidity : 65 %	Test By: King Kong

Voltage(V)	Temp()	Test Frequency (MHz)	Max. Deviation (KHz)	Verdict
Vnom	-20	5774.980567	-19.433	Pass
	-10	5774.980567	-19.433	Pass
	0	5774.980477	-19.523	Pass
	10	5774.980477	-19.523	Pass
	20	5774.980873	-19.127	Pass
	30	5774.980833	-19.167	Pass
	40	5774.980443	-19.557	Pass
	50	5774.980873	-19.127	Pass
85% Vnom	20	5774.980973	-19.027	Pass
115% Vnom	20	5774.980833	-19.167	Pass

8.5 UNDESIRABLE RADIATED SPURIOUS EMISSION

8.5.1 Applicable Standard

According to FCC Part 15.407 (b)

According to 789033 D02 Section II(G)

8.5.2 Conformance Limit

For transmitters operating in the 5.15-5.25 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.25-5.35 GHz band: All emissions outside of the 5.15-5.35 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.47-5.725 GHz band: All emissions outside of the 5.47-5.725 GHz band shall not exceed an e.i.r.p. of -27 dBm/MHz.

For transmitters operating in the 5.725-5.85 GHz band: All emissions shall be limited to a level of -27 dBm/MHz at 75 MHz or more above or below the band edge increasing linearly to 10 dBm/MHz at 25 MHz above or below the band edge, and from 25 MHz above or below the band edge increasing linearly to a level of 15.6 dBm/MHz at 5 MHz above or below the band edge, and from 5 MHz above or below the band edge increasing linearly to a level of 27 dBm/MHz at the band edge.

The emission measurements shall be performed using a minimum resolution bandwidth of 1 MHz. A lower resolution bandwidth may be employed near the band edge, when necessary, provided the measured energy is integrated to show the total power over 1 MHz.

Unwanted emissions below 1 GHz must comply with the general field strength limits set forth in §15.209

The emissions from an intentional radiator shall not exceed the field strength levels specified in the following table 15.209(a):

Restricted Frequency(MHz)	Field Strength (μV/m)	Field Strength (dBμV/m)	Measurement Distance
0.009-0.490	2400/F(KHz)	20 log (uV/m)	300
0.490-1.705	2400/F(KHz)	20 log (uV/m)	30
1.705-30	30	29.5	30
30-88	100	40	3
88-216	150	43.5	3
216-960	200	46	3
Above 960	500	54	3

The provisions of §15.205 apply to intentional radiators operating under this section, 15.205 Restricted bands of operation

MHz	MHz	MHz	GHz
0.090-0.110	16.42-16.423	399.9-410	4.5-5.15
10.495-0.505	16.69475-16.69525	608-614	5.35-5.46
2.1735-2.1905	16.80425-16.80475	960-1240	7.25-7.75
4.125-4.128	25.5-25.67	1300-1427	8.025-8.5
4.17725-4.17775	37.5-38.25	1435-1626.5	9.0-9.2
4.20725-4.20775	73-74.6	1645.5-1646.5	9.3-9.5
6.215-6.218	74.8-75.2	1660-1710	10.6-12.7
6.26775-6.26825	123-138	2200-2300	14.47-14.5
8.291-8.294	149.9-150.05	2310-2390	15.35-16.2
8.362-8.366	156.52475-156.52525	2483.5-2500	17.7-21.4
8.37625-8.38675	156.7-156.9	2690-2900	22.01-23.12
8.41425-8.41475	162.0125-167.17	3260-3267	23.6-24.0
12.29-12.293	167.72-173.2	3332-3339	31.2-31.8
12.51975-12.52025	240-285	3345.8-3358	36.43-36.5
12.57675-12.57725	322-335.4	3600-4400	(2)
13.36-13.41			

- Remark:
1. Emission level in dBuV/m=20 log (uV/m)
 2. Measurement was performed at an antenna to the closed point of EUT distance of meters.
 3. Only spurious frequency is permitted to locate within the Restricted Bands specified in provision of §

15.205, and the emissions located in restricted bands also comply with 15.209 limit.

8.5.3 Test Configuration

Test according to clause 6.2 radio frequency test setup

8.5.4 Test Procedure

■ Unwanted Emissions Measurements below 1000 MHz

Compliance shall be demonstrated using CISPR quasi-peak detection; however, peak detection is permitted as an alternative to quasi-peak detection.

The EUT was placed on a turn table which is 0.8m above ground plane.

And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.

Repeat above procedures until all frequency measured was complete.

We use software control the EUT, Let EUT hopping on and transmit with highest power, All the modes have been tested and the worst result was reported.

Use the following spectrum analyzer settings:

Set RBW=120kHz for $f < 1$ GHz(30MHz to 1GHz), 200Hz for $f < 150$ KHz(9KHz to 150KHz), 9KHz for < 30 MHz (150KHz to 30KHz).

Set the VBW > RBW.

Detector = Peak.

Trace mode = max hold.

Follow the guidelines in ANSI C63.10-2013 with respect to maximizing the emission by rotating the EUT, measuring the emission while the EUT is situated in three orthogonal planes (if appropriate), adjusting the measurement antenna height and polarization, etc. A pre-amp and a high pass filter are required for this test, in order to provide the measuring system with sufficient sensitivity. Allow the trace to stabilize. The peak reading of the emission, after being corrected by the antenna factor, cable loss, pre-amp gain, etc., is the peak field strength, which must comply with the limit specified in Section 15.35(b). Submit this data. Repeat above procedures until all frequency measured was complete.

■ Unwanted Maximum peak Emissions Measurements above 1000 MHz

Maximum emission levels are measured by setting the analyzer as follows:

RBW = 1 MHz.

VBW $\geq$ 3 MHz.

Detector = Peak.

Sweep time = auto.

Trace mode = max hold.

Allow sweeps to continue until the trace stabilizes. Note that if the transmission is not continuous, the time required for the trace to stabilize will increase by a factor of approximately $1/x$, where x is the duty cycle. For example, at 50 percent duty cycle, the measurement time will increase by a factor of two relative to measurement time for continuous transmission.

■ Unwanted Average Emissions Measurements above 1000 MHz

Method VB (Averaging using reduced video bandwidth): Alternative method.

RBW = 1 MHz.

Video bandwidth. • If the EUT is configured to transmit with duty cycle ≥ 98 percent, set $VBW \leq RBW/100$ (i.e., 10 kHz) but not less than 10 Hz.

• If the EUT duty cycle is < 98 percent, set $VBW \geq 1/T$, where T is defined in section II.B.1.a).

Video bandwidth mode or display mode • The instrument shall be set to ensure that video filtering is applied in the power domain. Typically, this requires setting the detector mode to RMS and setting the Average-VBW Type to Power (RMS).

• As an alternative, the analyzer may be set to linear detector mode. Ensure that video filtering is applied in linear voltage domain (rather than in a log or dB domain). Some analyzers require linear display mode in order to accomplish this. Others have a setting for Average-VBW Type, which can be set to "Voltage" regardless of the display mode.

Detector = Peak.

Sweep time = auto.

Trace mode = max hold.

Allow max hold to run for at least 50 traces if the transmitted signal is continuous or has at least 98 percent duty cycle. For lower duty cycles, increase the minimum number of traces by a factor of $1/x$, where x is the duty cycle. For example, use at least 200 traces if the duty cycle is 25 percent. (If a specific emission is demonstrated to be continuous—i.e., 100 percent duty cycle—rather than turning on and off with the

transmit cycle, at least 50 traces shall be averaged.)

■ Band edge measurements.

Unwanted band-edge emissions may be measured using either of the special band-edge measurement techniques (the marker-delta or integration methods) described below. Note that the marker-delta method is primarily a radiated measurement technique that requires the 99% occupied bandwidth edge to be within 2 MHz of the authorized band edge, whereas the integration method can be used in either a radiated or conducted measurement without any special requirement with regards to the displacement of the unwanted emission(s) relative to the authorized bandwidth.

Marker-Delta Method.

The marker-delta method, as described in ANSI C63.10, can be used to perform measurements of the radiated unwanted emissions level of emissions provided that the 99% occupied bandwidth of the fundamental is within 2 MHz of the authorized band-edge.

8.5.5 Test Results

■ ☒ For Undesirable radiated Spurious Emission in UNII Band I

The voltage 120V & 240V and the modes 802.11a/n/ac has been tested and the worst result recorded as below:

- ☒ Undesirable radiated Spurious Emission Above 1GHz (1GHz to 40GHz)

Temperature :	28	Test Date :	March 31, 2017
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)
4236.68	V	52.96	-42.27	-27	-15.27
6925.09	V	57.94	-37.29	-27	-10.29
10305.67	V	61.18	-34.05	-27	-7.05
4100.59	H	53.73	-41.5	-27	-14.5
7469.12	H	58.47	-36.76	-27	-9.76
10492.6	H	62.96	-32.27	-27	-5.27

Temperature :	28	Test Date :	March 31, 2017
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)
4235.31	V	52.27	-42.96	-27	-15.96
6926.13	V	57.47	-37.76	-27	-10.76
10306.72	V	60.91	-34.32	-27	-7.32
4099.25	H	53.1	-42.13	-27	-15.13
7470.18	H	57.62	-37.61	-27	-10.61
10491.25	H	59.79	-35.44	-27	-8.44

Temperature :	28	Test Date :	March 31, 2017
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)
4233.79	V	51.75	-43.48	-27	-16.48
6927.14	V	56.99	-38.24	-27	-11.24
10305.21	V	62.07	-33.16	-27	-6.16
4097.79	H	52.95	-42.28	-27	-15.28
7471.16	H	57.57	-37.66	-27	-10.66
10489.81	H	61.19	-34.04	-27	-7.04

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV 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 Undesirable radiated Spurious Emission in Band Edge

Temperature :	28	Test Date :	March 31, 2017
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5180

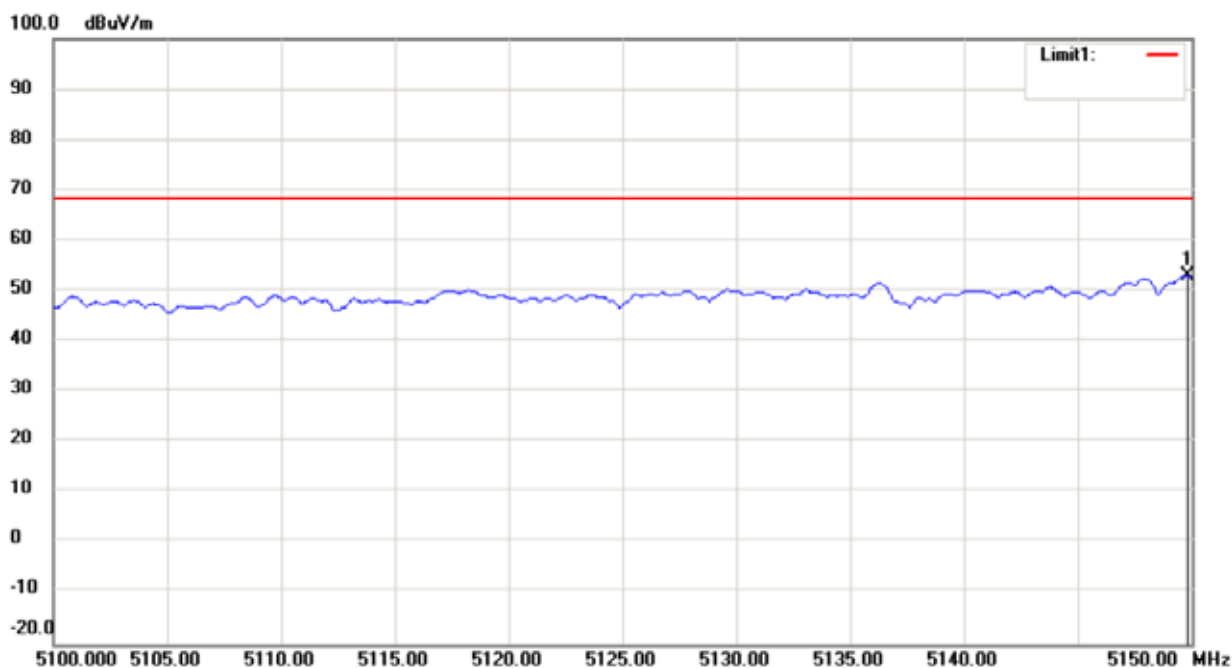
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5149.85	H	53.08	-42.15	-27	Pass
5149.90	V	58.75	-36.48	-27	Pass

Temperature :	28	Test Date :	March 31, 2017
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5240

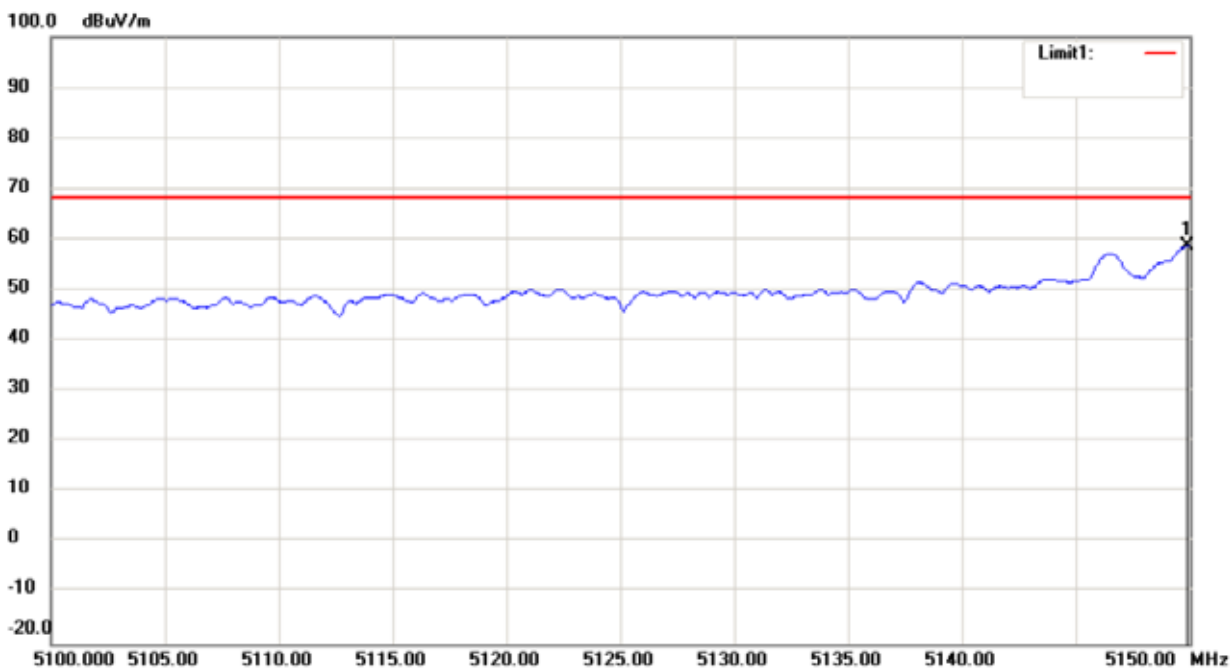
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5350.10	V	49.42	-45.81	-27	Pass
5351.65	H	48.38	-46.85	-27	Pass

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV 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

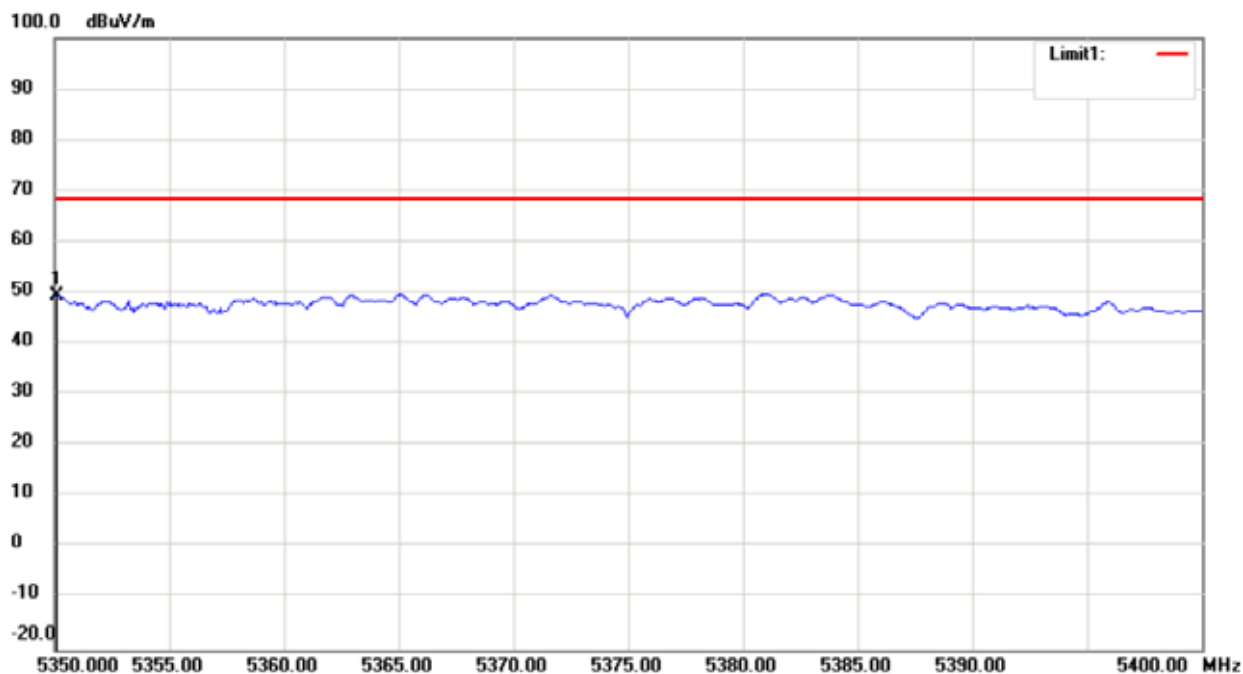
Test Model	UNII Band I					
	Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)					
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)	Ant.Pol		
	☒ 5180	☐ 5200	☐ 5240	H		



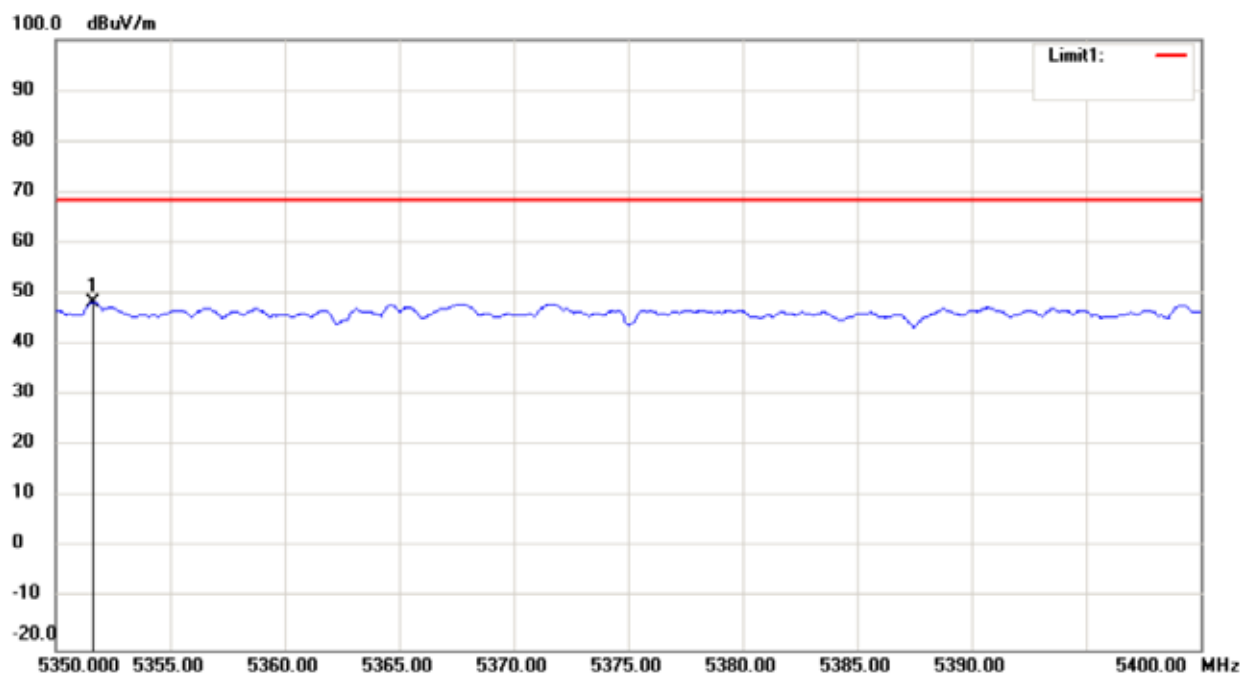
Test Model	UNII Band I					
	Undesirable radiated Spurious Emission in Restricted Band (5100-5150MHz)					
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)	Ant.Pol		
	☒ 5180	☐ 5200	☐ 5240	V		



UNII Band I			
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz)		
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)
	☐ 5180	☐ 5200	☒ 5240
			Ant.Pol H



UNII Band I			
Test Model	Undesirable radiated Spurious Emission in Restricted Band (5350-5400MHz)		
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)
	☐ 5180	☐ 5200	☒ 5240
			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	Test Date :	March 31, 2017
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)
4292.26	V	47.57	-47.66	-27	-20.66
6983.08	V	52.26	-42.97	-27	-15.97
10361.24	V	60.12	-35.11	-27	-8.11
4156.08	H	48.51	-46.72	-27	-19.72
7527.14	H	53.29	-41.94	-27	-14.94
10548.10	H	59.42	-35.81	-27	-8.81

Temperature :	28	Test Date :	March 31, 2017
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)
4290.80	V	47.42	-47.81	-27	-20.81
6984.06	V	52.21	-43.02	-27	-16.02
10359.80	V	59.52	-35.71	-27	-8.71
4154.59	H	47.87	-47.36	-27	-20.36
7528.13	H	52.77	-42.46	-27	-15.46
10546.62	H	59.06	-36.17	-27	-9.17

Temperature :	28	Test Date :	March 31, 2017
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)
4289.44	V	46.86	-48.37	-27	-21.37
6985.13	V	51.93	-43.30	-27	-16.30
10358.43	V	58.83	-36.40	-27	-9.40
4155.63	H	47.40	-47.83	-27	-20.83
7529.18	H	52.50	-42.73	-27	-15.73
10545.28	H	58.43	-36.80	-27	-9.80

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV 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 Undesirable radiated Spurious Emission in Band Edge

Temperature :	28	Test Date :	March 31, 2017
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5260

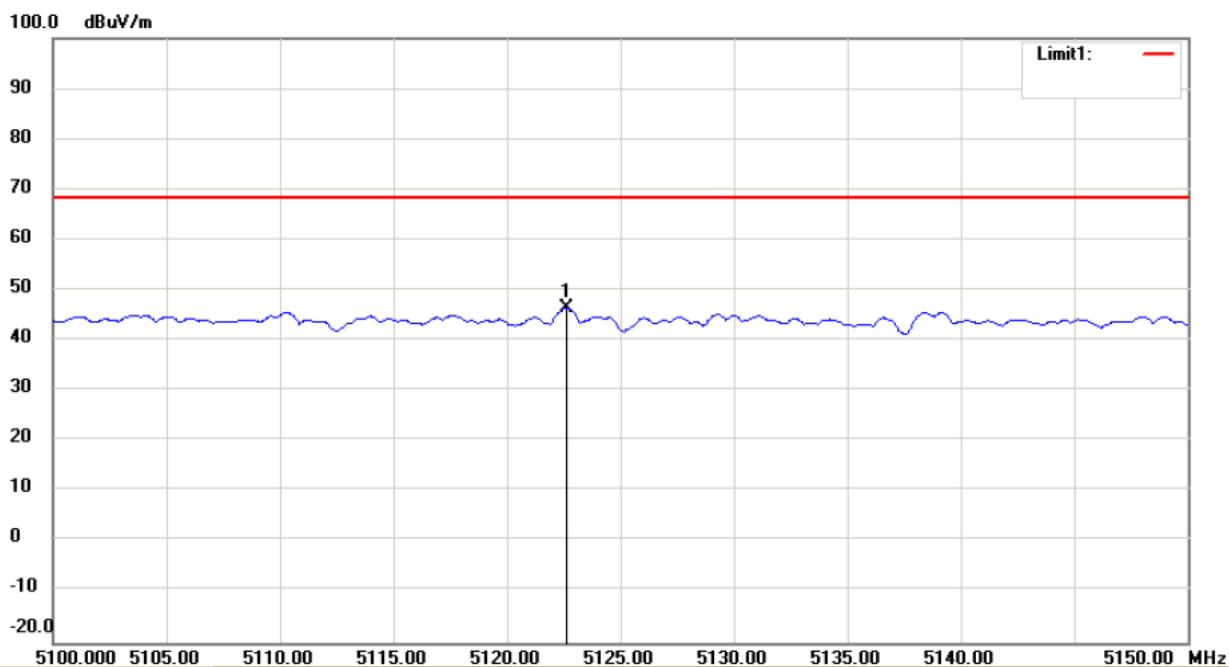
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5110.15	V	45.72	-49.51	-27	Pass
5354.35	H	53.91	-41.32	-27	Pass

Temperature :	28	Test Date :	March 31, 2017
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5320

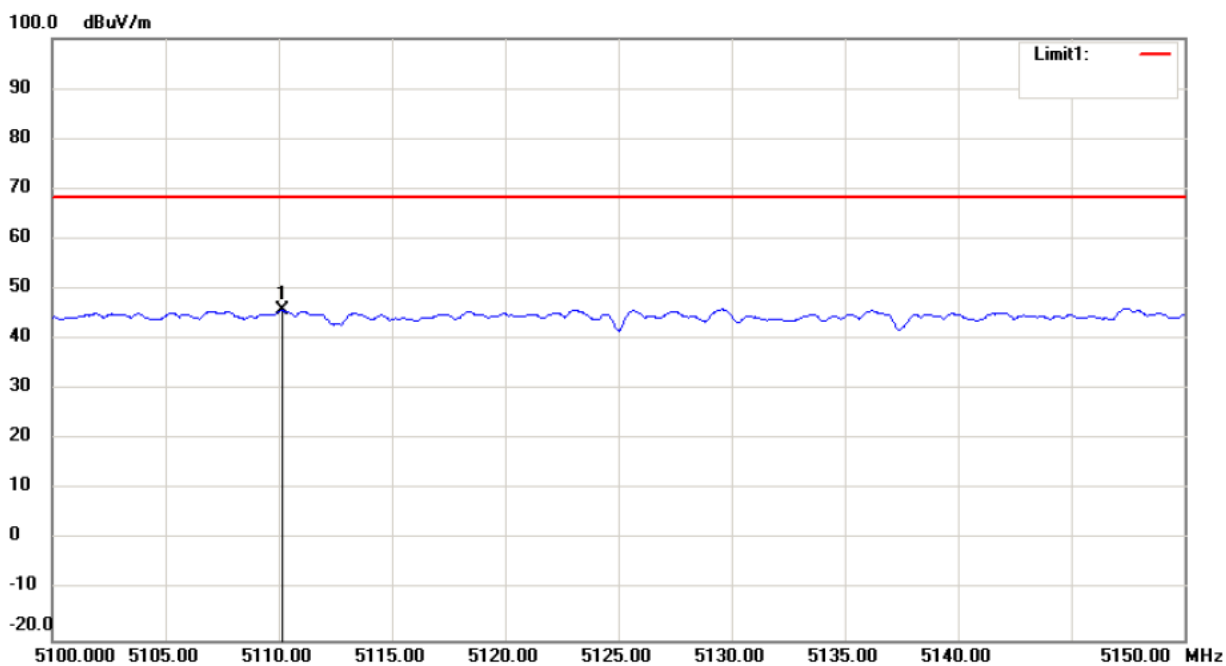
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5354.3	V	53.91	-41.32	-27	Pass
5470.0	H	53.44	-41.79	-27	Pass

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV 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

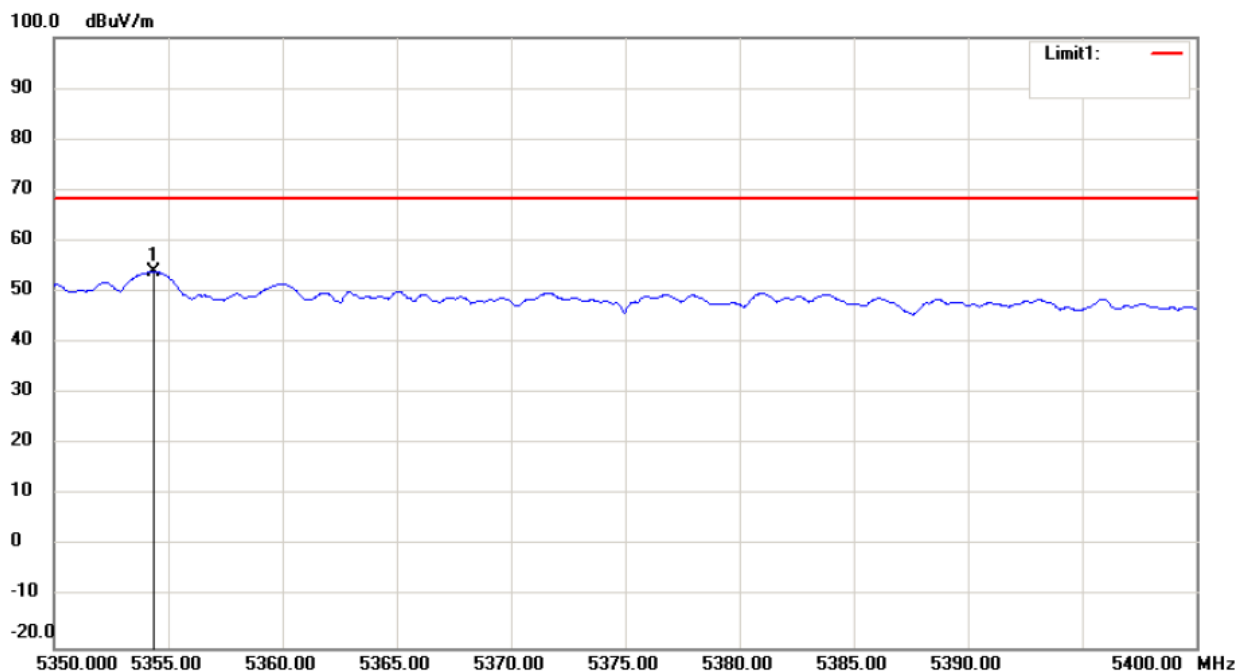
UNII Band II-A			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)
	☒ 5260		Ant.Pol H



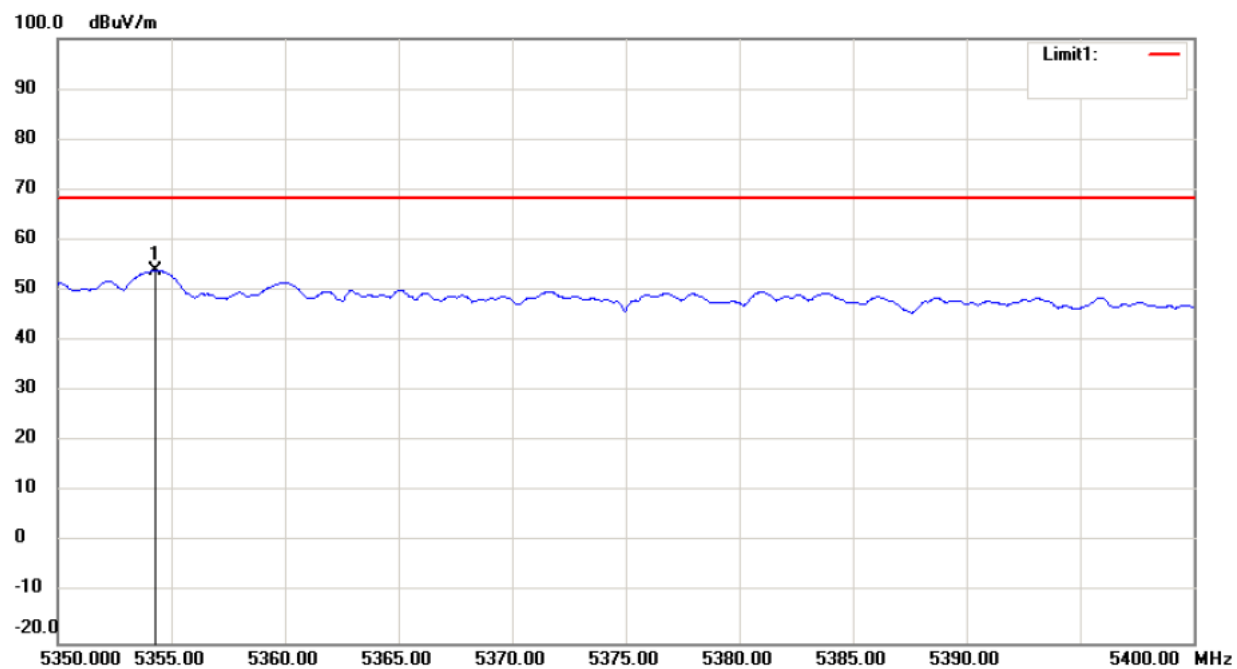
UNII Band II-A			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)
	☒ 5260		Ant.Pol V



UNII Band II-A			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)
	☒ 5320		Ant.Pol H



UNII Band II-A			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)
	☒ 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	Test Date :	March 31, 2017
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)
4291.85	V	47.15	-48.08	-27	-21.08
6982.72	V	51.58	-43.65	-27	-16.65
10360.86	V	58.67	-36.56	-27	-9.56
4153.24	H	47.7	-47.53	-27	-20.53
7526.75	H	52.19	-43.04	-27	-16.04
10547.69	H	58.69	-36.54	-27	-9.54

Temperature :	28	Test Date :	March 31, 2017
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)
4290.48	V	46.46	-48.77	-27	-21.77
6983.76	V	51.11	-44.12	-27	-17.12
10361.91	V	58.40	-36.83	-27	-9.83
4151.9	H	47.07	-48.16	-27	-21.16
7527.81	H	51.34	-43.89	-27	-16.89
10546.34	H	58.52	-36.71	-27	-9.71

Temperature :	28	Test Date :	March 31, 2017
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)
4291.58	V	46.04	-49.19	-27	-22.19
6982.33	V	50.42	-44.81	-27	-17.81
10362.89	V	57.42	-37.81	-27	-10.81
4150.46	H	46.71	-48.52	-27	-21.52
7526.29	H	50.82	-44.41	-27	-17.41
10547.35	H	58.04	-37.19	-27	-10.19

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV 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 Undesirable radiated Spurious Emission in Band Edge

Temperature :	28	Test Date :	March 31, 2017
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5260

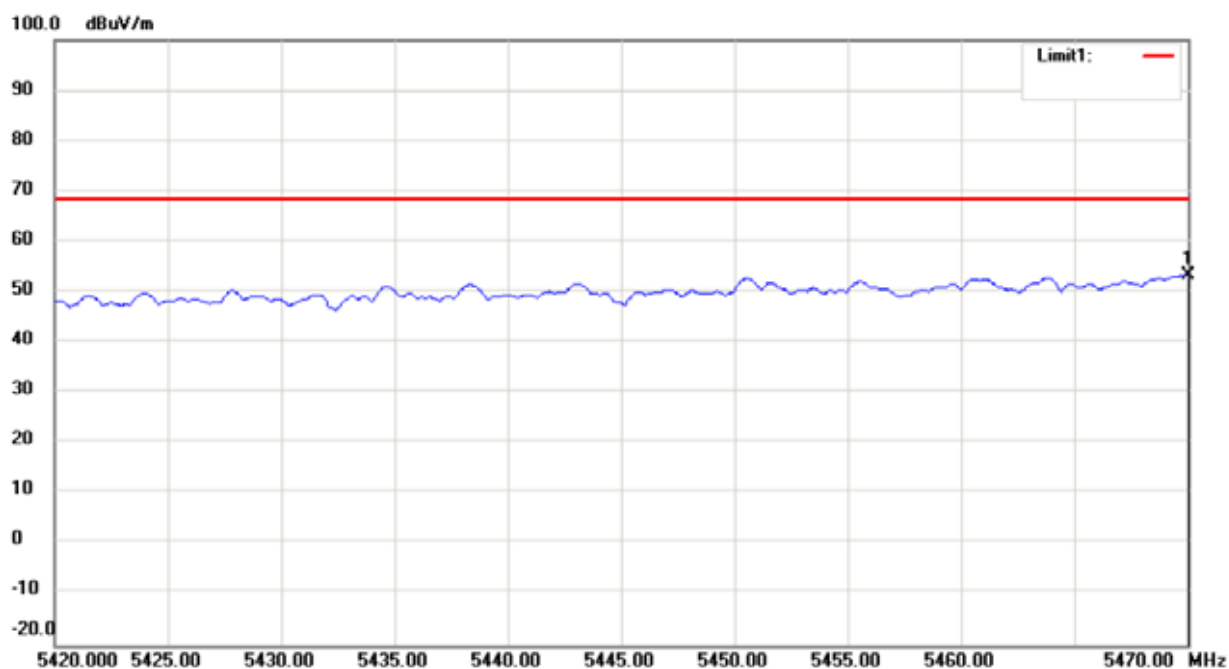
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5468.7	V	52.59	-42.64	-27	Pass
5470.0	H	53.44	-41.79	-27	Pass

Temperature :	28	Test Date :	March 31, 2017
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5320

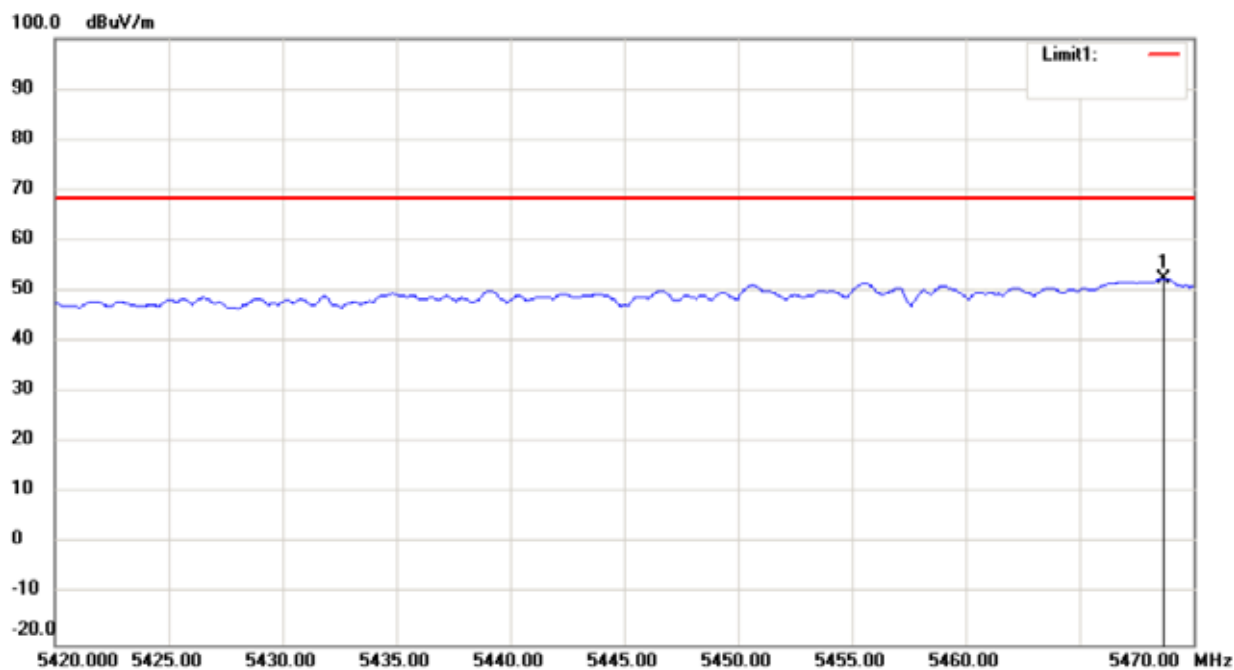
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5725.0	V	55.11	-40.12	-27	Pass
5725.0	H	54.08	-41.15	-27	Pass

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV 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

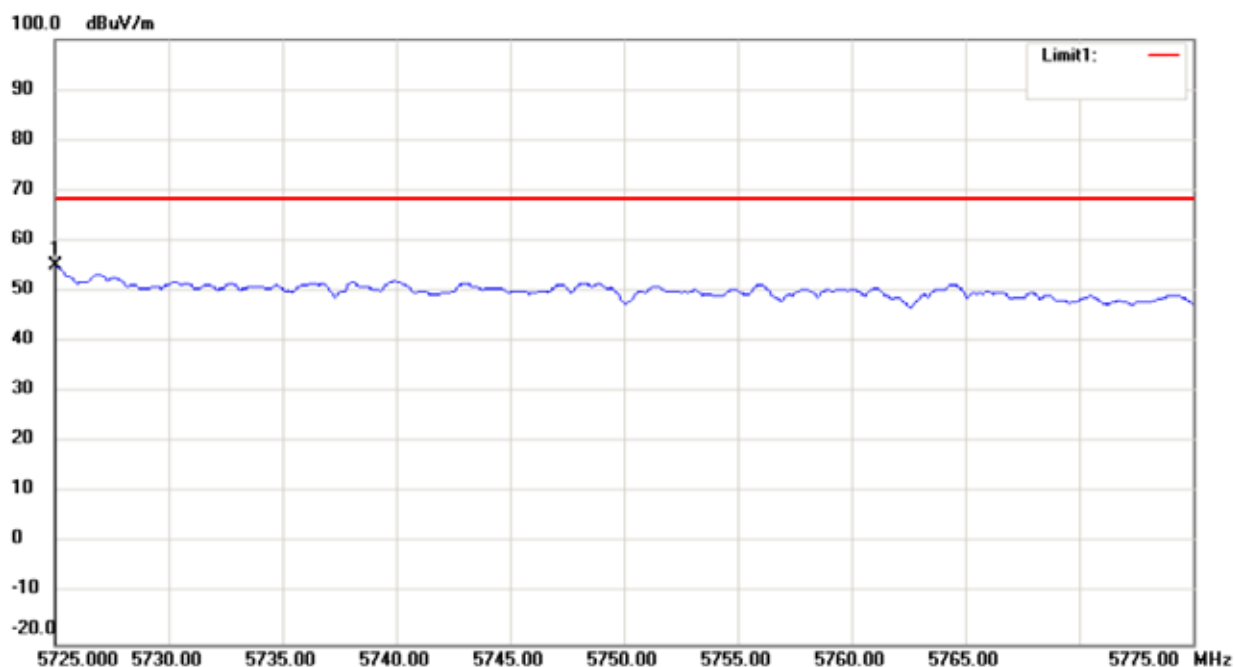
UNII Band II-C			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)
	☒ 5500		Ant.Pol H



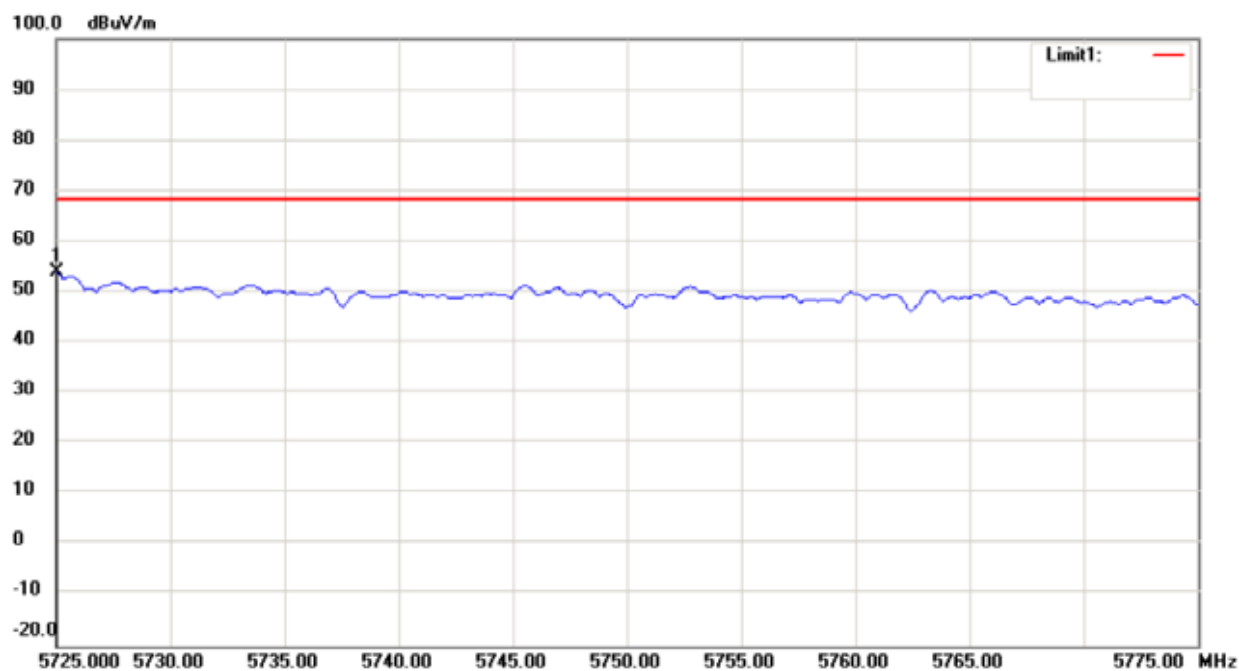
UNII Band II-C			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)
	☒ 5500		Ant.Pol V



UNII Band II-C			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)
	☒ 5700		Ant.Pol H



UNII Band II-C			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)
	☒ 5700		Ant.Pol V



■ ☒ For Undesirable radiated Spurious Emission in UNII Band III

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	Test Date :	March 31, 2017
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5745

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
4289.05	V	45.77	-49.46	-27.00	-22.46
6984.74	V	50.13	-45.1	-27.00	-18.1
10360.47	V	58.04	-37.19	-27.00	-10.19
4150.38	H	46.55	-48.68	-27.00	-21.68
7528.82	H	50.86	-44.37	-27.00	-17.37
10544.83	H	57.68	-37.55	-27.00	-10.55

Temperature :	28	Test Date :	March 31, 2017
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5785

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
4287.7	V	45.60	-49.63	-27.00	-22.63
6983.36	V	49.55	-45.68	-27.00	-18.68
10361.54	V	57.67	-37.56	-27.00	-10.56
4151.48	H	46.13	-49.10	-27.00	-22.10
7527.39	H	50.17	-45.06	-27.00	-18.06
10545.81	H	56.70	-38.53	-27.00	-11.53

Temperature :	28	Test Date :	March 31, 2017
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency(MHz):	5825

Freq. (MHz)	Ant.Pol. H/V	Field Strength (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Over(dB)
4288.77	V	45.32	-49.91	-27.00	-22.91
6981.99	V	48.86	-46.37	-27.00	-19.37
10362.58	V	57.2	-38.03	-27.00	-11.03
4152.53	H	45.86	-49.37	-27.00	-22.37
7526.05	H	49.54	-45.69	-27.00	-18.69
10546.87	H	55.85	-39.38	-27.00	-12.38

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV 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 band edge

Temperature :	28	Test Date :	March 31, 2017
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency:	5745

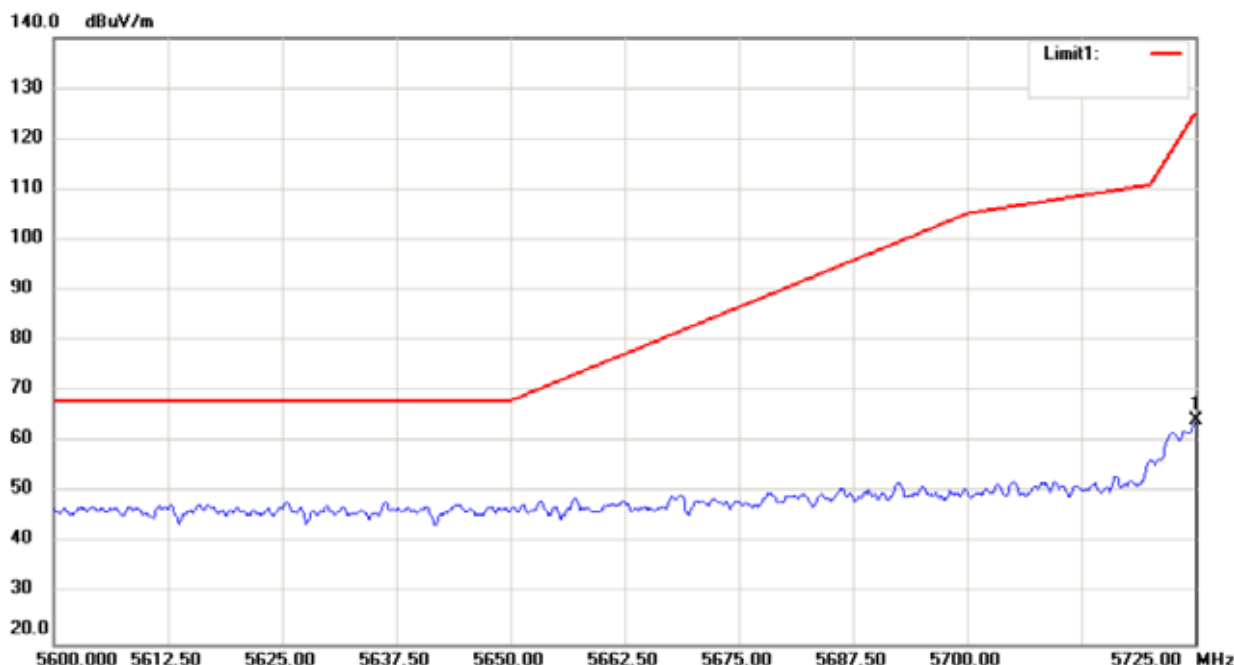
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5725.0	H	64.13	-31.10	27.0	PASS
5725.0	V	62.09	-33.14	27.0	PASS

Temperature :	28	Test Date :	March 31, 2017
Humidity :	65 %	Test By:	King Kong
Test mode:	802.11a	Frequency:	5825

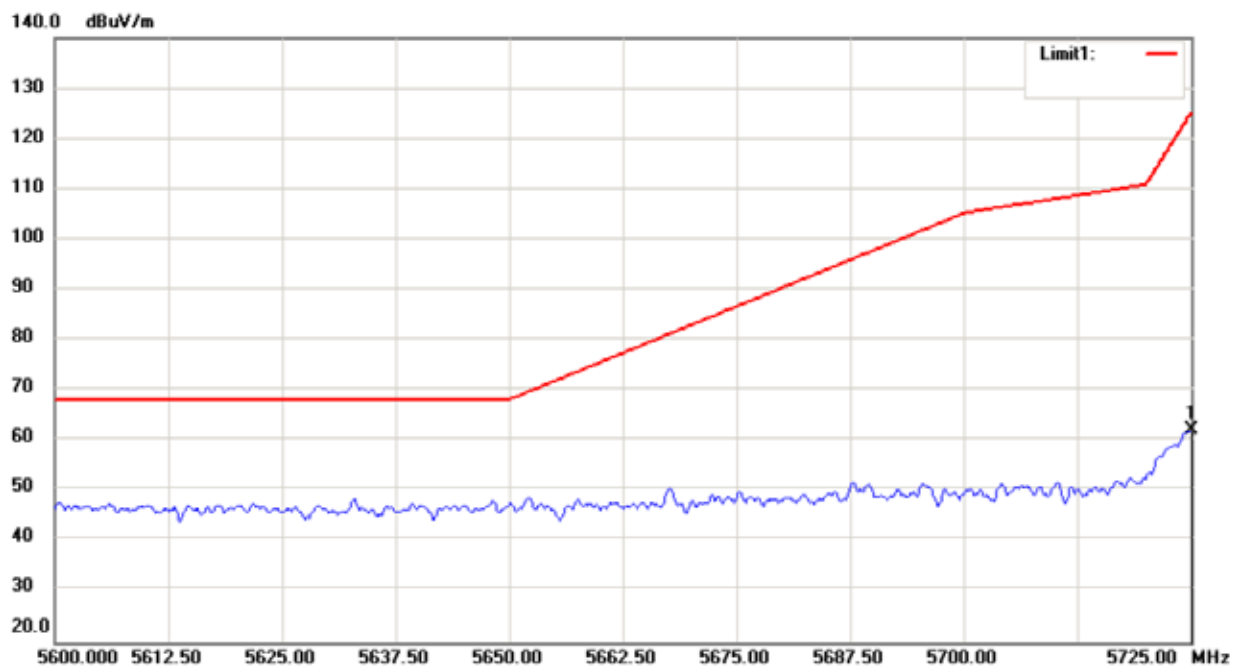
Freq. (MHz)	Ant.Pol. H/V	Field Strength (RBW=100KHz) (dBuV/m)	E.I.R.P (dBm)	Limit (dBm)	Verdict
5863.0	V	52.58	-42.65	13.4	PASS
5852.0	H	54.71	-40.52	22.4	PASS

Note: (1) All Readings are Peak Value (VBW=3MHz) and AV 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

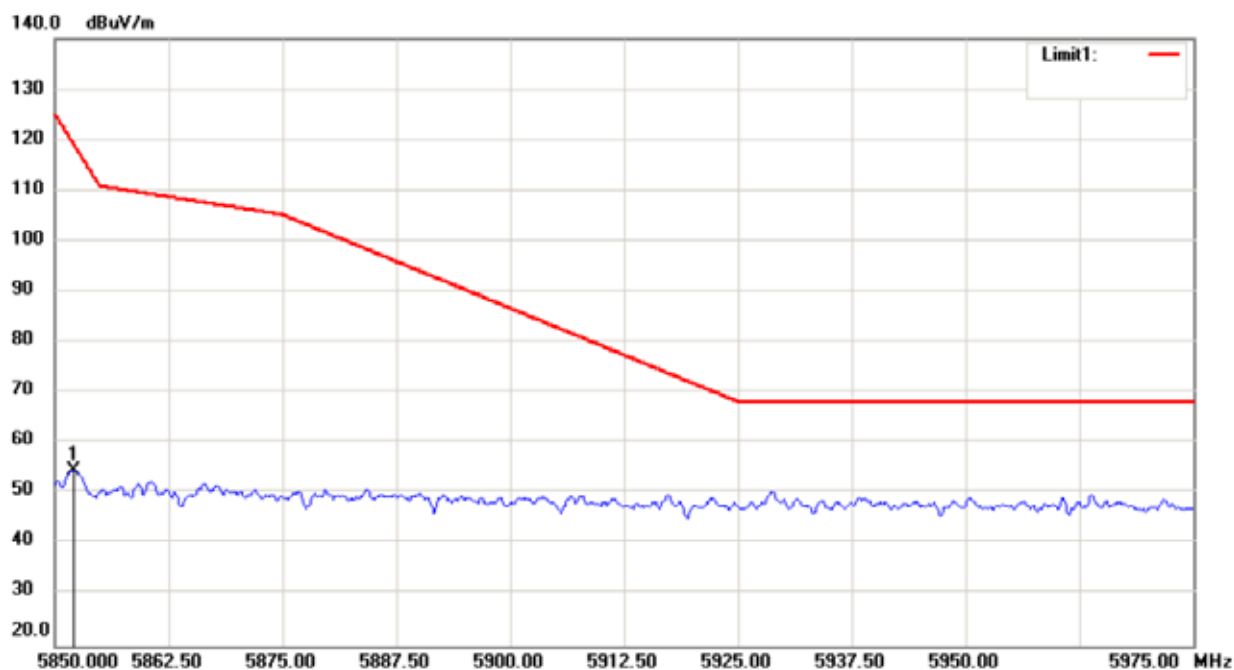
UNII Band III				
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge	
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)	
	☒ 5745		Ant.Pol	H



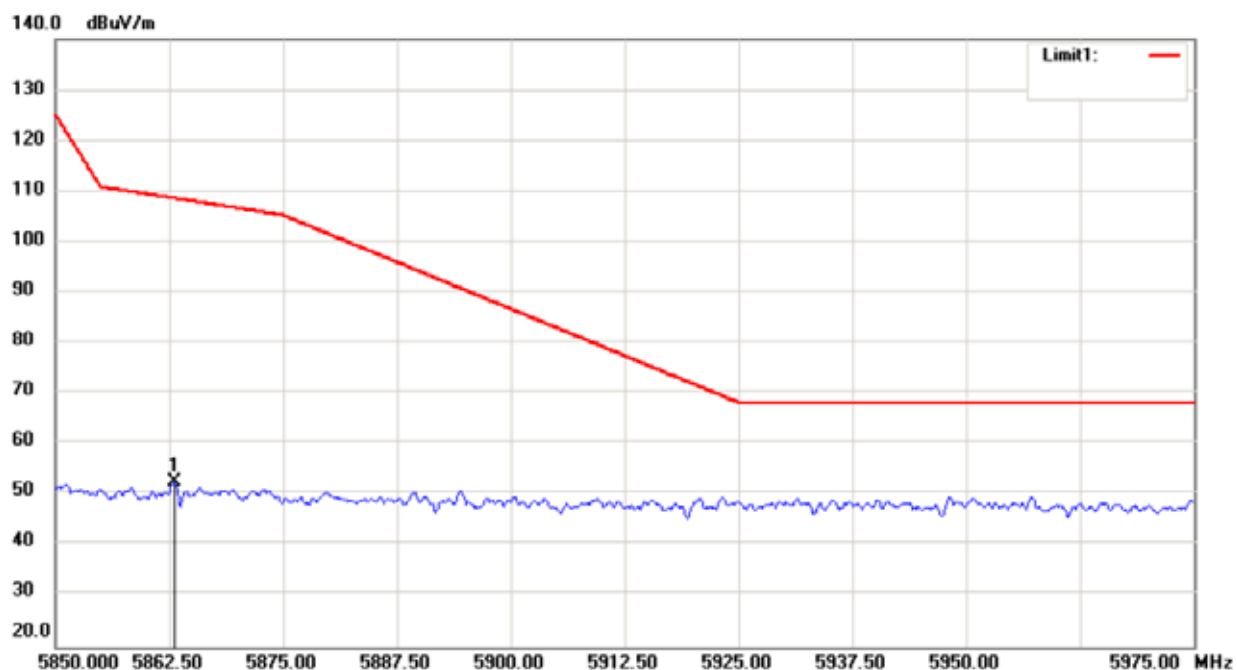
UNII Band III				
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge	
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)	
	☒ 5745		Ant.Pol	V



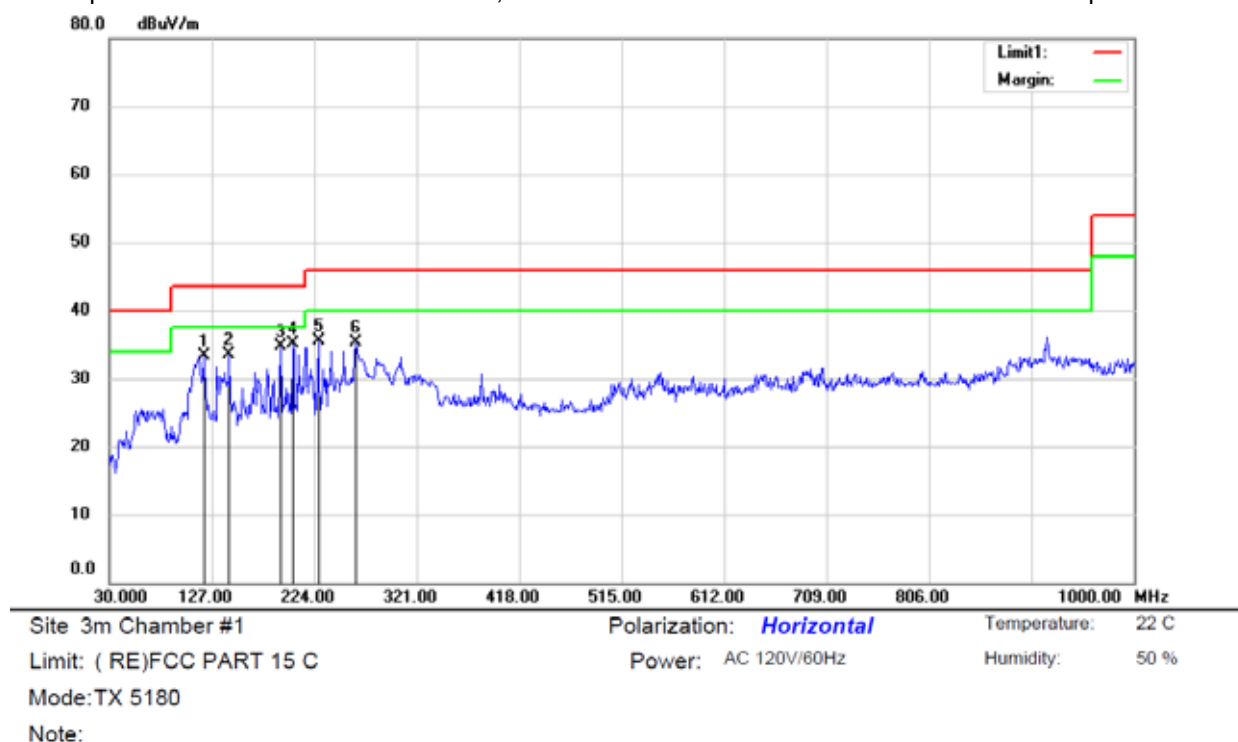
UNII Band III			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)
	☒ 5825		Ant.Pol
			H



UNII Band III			
Test Model	Undesirable radiated	Undesirable radiated	Spurious Emission in Band Edge
	☒ 802.11a	☐ 802.11n(HT20)	☐ 802.11n(HT40)
	☒ 5825		Ant.Pol
			V



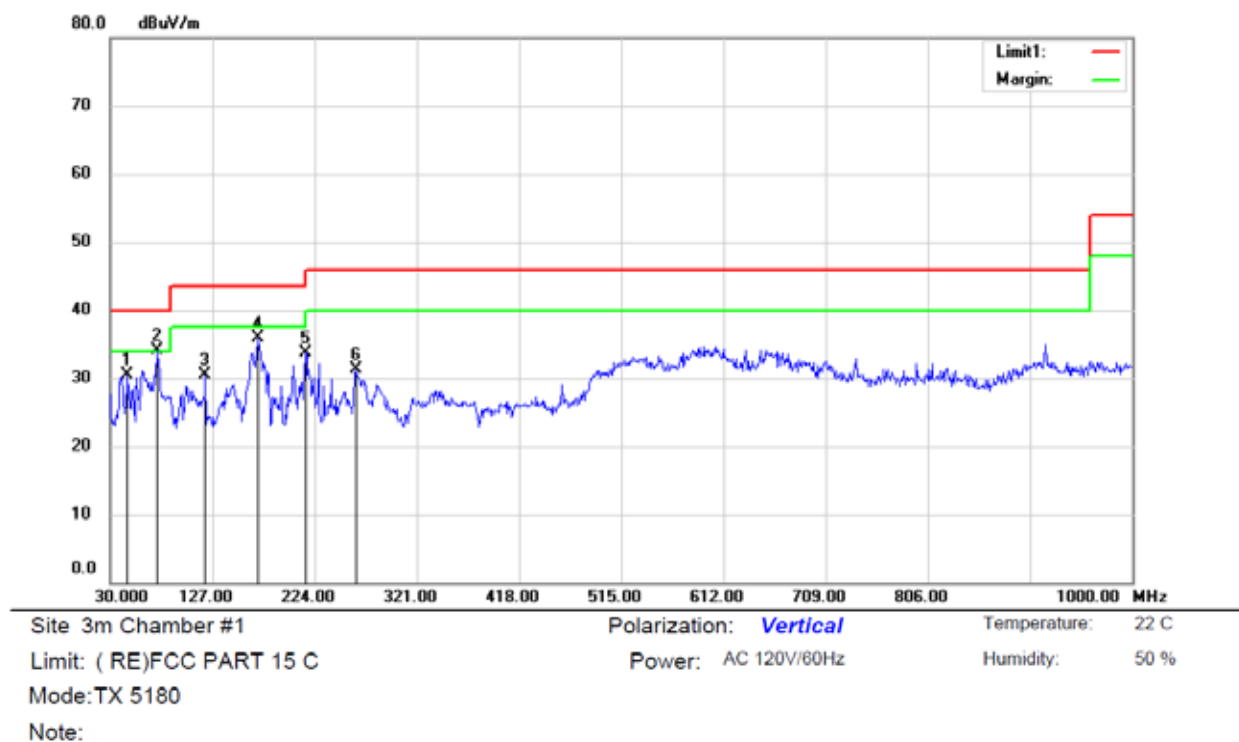
- Undesirable radiated Spurious Emission below 1GHz (30MHz to 1GHz)
All adapter and all mode have been tested, and the worst results have been recorded in the report.



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		119.2400	47.21	-13.84	33.37	43.50	-10.13	QP		
2		143.4900	49.75	-16.22	33.53	43.50	-9.97	QP		
3		191.9900	47.47	-12.75	34.72	43.50	-8.78	QP		
4	*	203.6300	47.47	-12.38	35.09	43.50	-8.41	QP		
5		227.8800	47.11	-11.62	35.49	46.00	-10.51	QP		
6		263.7700	46.17	-10.85	35.32	46.00	-10.68	QP		

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

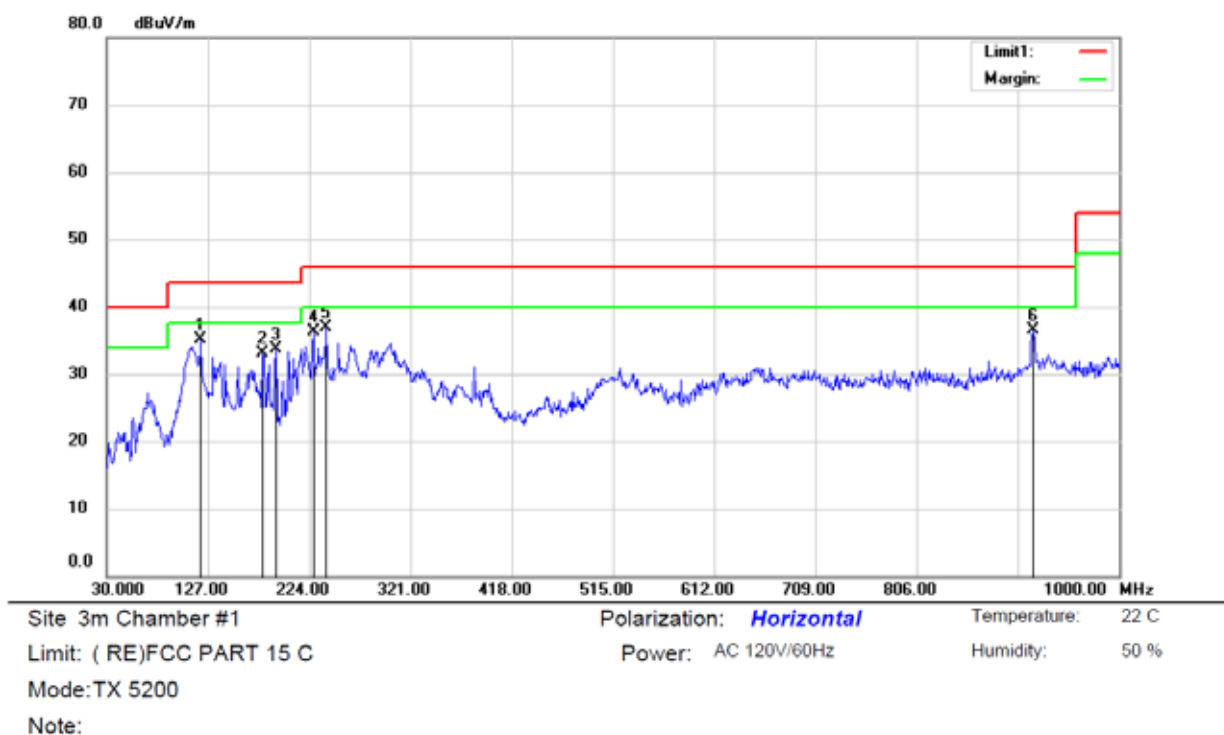
Operator: LQZ



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		46.4900	42.04	-11.49	30.55	40.00	-9.45	QP		
2	*	74.6200	51.04	-17.02	34.02	40.00	-5.98	QP		
3		120.2100	44.45	-14.02	30.43	43.50	-13.07	QP		
4		169.6800	50.42	-14.51	35.91	43.50	-7.59	QP		
5		215.2700	45.16	-11.47	33.69	43.50	-9.81	QP		
6		262.8000	41.91	-10.69	31.22	46.00	-14.78	QP		

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

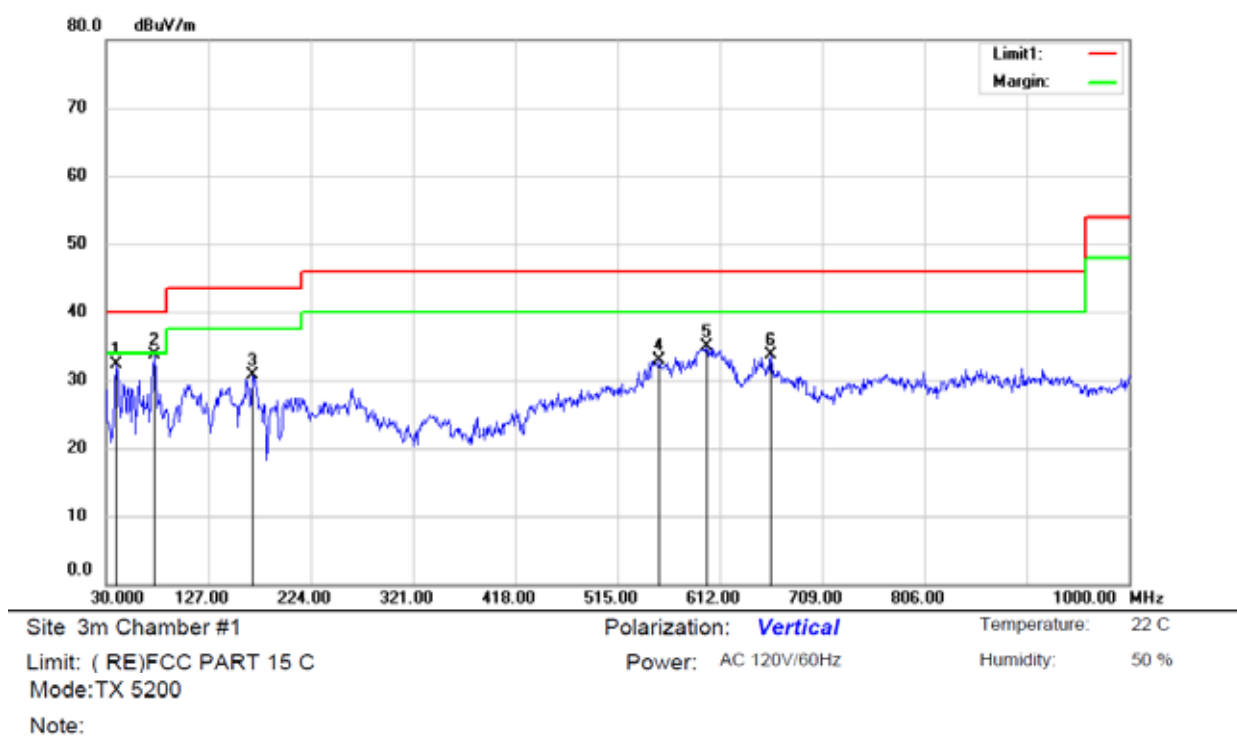
Operator: LQZ



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	*	120.2100	49.14	-14.02	35.12	43.50	-8.38	QP		
2		179.3800	46.71	-13.66	33.05	43.50	-10.45	QP		
3		191.9900	46.41	-12.75	33.66	43.50	-9.84	QP		
4		227.8800	47.87	-11.62	36.25	46.00	-9.75	QP		
5		240.4900	47.77	-10.92	36.85	46.00	-9.15	QP		
6		917.5500	34.71	1.76	36.47	46.00	-9.53	QP		

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

Operator: LQZ



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		39.7000	43.88	-11.56	32.32	40.00	-7.68	QP		
2	*	75.5900	50.72	-17.06	33.66	40.00	-6.34	QP		
3		168.7100	45.18	-14.56	30.62	43.50	-12.88	QP		
4		554.7700	36.76	-3.90	32.86	46.00	-13.14	QP		
5		599.3900	37.61	-2.69	34.92	46.00	-11.08	QP		
6		660.5000	35.25	-1.59	33.66	46.00	-12.34	QP		

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

Operator: LQZ



Site 3m Chamber #1 Polarization: **Horizontal** Temperature: 22 C
 Limit: (RE)FCC PART 15 C Power: AC 120V/60Hz Humidity: 50 %
 Mode:TX 5240
 Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		68.8000	45.83	-15.55	30.28	40.00	-9.72	QP		
2		114.3900	46.45	-13.00	33.45	43.50	-10.05	QP		
3		138.6400	49.88	-16.00	33.88	43.50	-9.62	QP		
4		227.8800	44.06	-11.62	32.44	46.00	-13.56	QP		
5		678.9300	35.91	-2.29	33.62	46.00	-12.38	QP		
6	*	917.5500	35.77	1.76	37.53	46.00	-8.47	QP		

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

Operator: LQZ



Site 3m Chamber #1

Polarization: **Vertical**

Temperature: 22 C

Limit: (RE)FCC PART 15 C

Power: AC 120V/60Hz

Humidity: 50 %

Mode:TX 5240

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	39.7000	42.01	-11.56	30.45	40.00	-9.55	QP		
2		62.9800	41.61	-13.27	28.34	40.00	-11.66	QP		
3		104.6900	39.96	-11.33	28.63	43.50	-14.87	QP		
4		145.4300	46.02	-16.17	29.85	43.50	-13.65	QP		
5		168.7100	47.63	-14.56	33.07	43.50	-10.43	QP		
6		589.6900	38.54	-3.48	35.06	46.00	-10.94	QP		

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

Operator: LQZ



Site 3m Chamber #1

Polarization: **Horizontal**

Temperature: 22 C

Limit: (RE)FCC PART 15 C

Power: AC 120V/60Hz

Humidity: 50 %

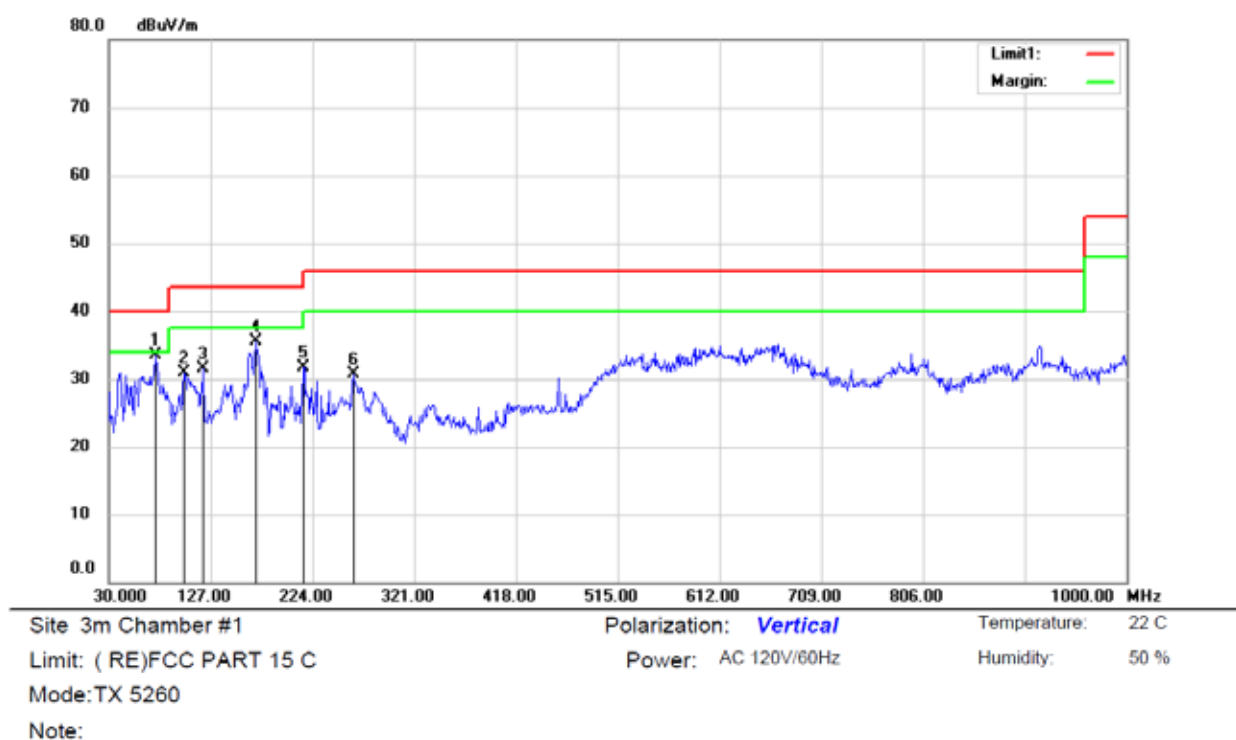
Mode:TX 5260

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		114.3900	45.29	-13.00	32.29	43.50	-11.21	QP		
2		143.4900	49.75	-16.22	33.53	43.50	-9.97	QP		
3		203.6300	46.47	-12.38	34.09	43.50	-9.41	QP		
4	*	215.2700	47.01	-11.47	35.54	43.50	-7.96	QP		
5		227.8800	47.61	-11.62	35.99	46.00	-10.01	QP		
6		917.5500	35.78	1.76	37.54	46.00	-8.46	QP		

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

Operator: LQZ



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	74.6200	50.54	-17.02	33.52	40.00	-6.48	QP		
2		101.7800	42.33	-11.47	30.86	43.50	-12.64	QP		
3		120.2100	45.45	-14.02	31.43	43.50	-12.07	QP		
4		169.6800	49.92	-14.51	35.41	43.50	-8.09	QP		
5		215.2700	43.16	-11.47	31.69	43.50	-11.81	QP		
6		262.8000	41.41	-10.69	30.72	46.00	-15.28	QP		

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

Operator: LQZ



Site 3m Chamber #1

Polarization: Horizontal

Temperature: 22 C

Limit: (RE)FCC PART 15 C

Power: AC 120V/60Hz

Humidity: 50 %

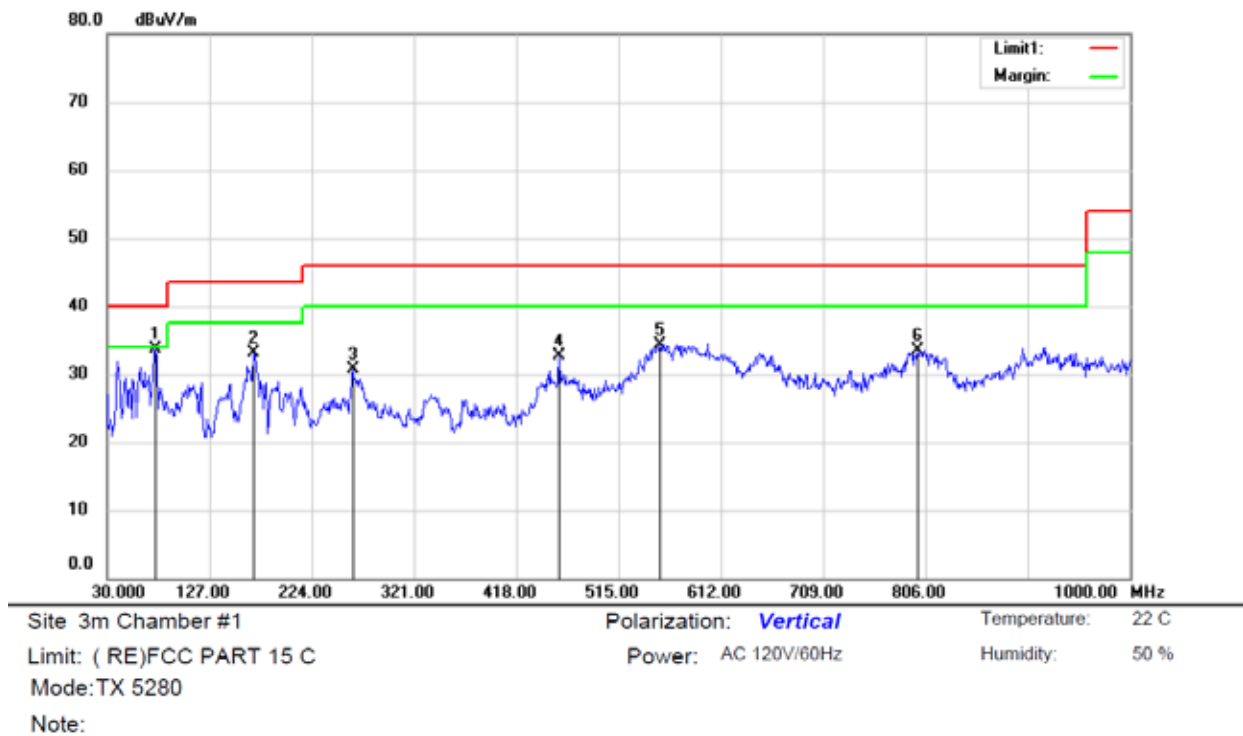
Mode:TX 5280

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	120.2100	48.14	-14.02	34.12	43.50	-9.38	QP		
2		227.8800	46.87	-11.62	35.25	46.00	-10.75	QP		
3		297.7200	45.11	-9.94	35.17	46.00	-10.83	QP		
4		521.7900	39.18	-5.27	33.91	46.00	-12.09	QP		
5		653.7100	32.53	-1.28	31.25	46.00	-14.75	QP		
6		917.5500	34.71	1.76	36.47	46.00	-9.53	QP		

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

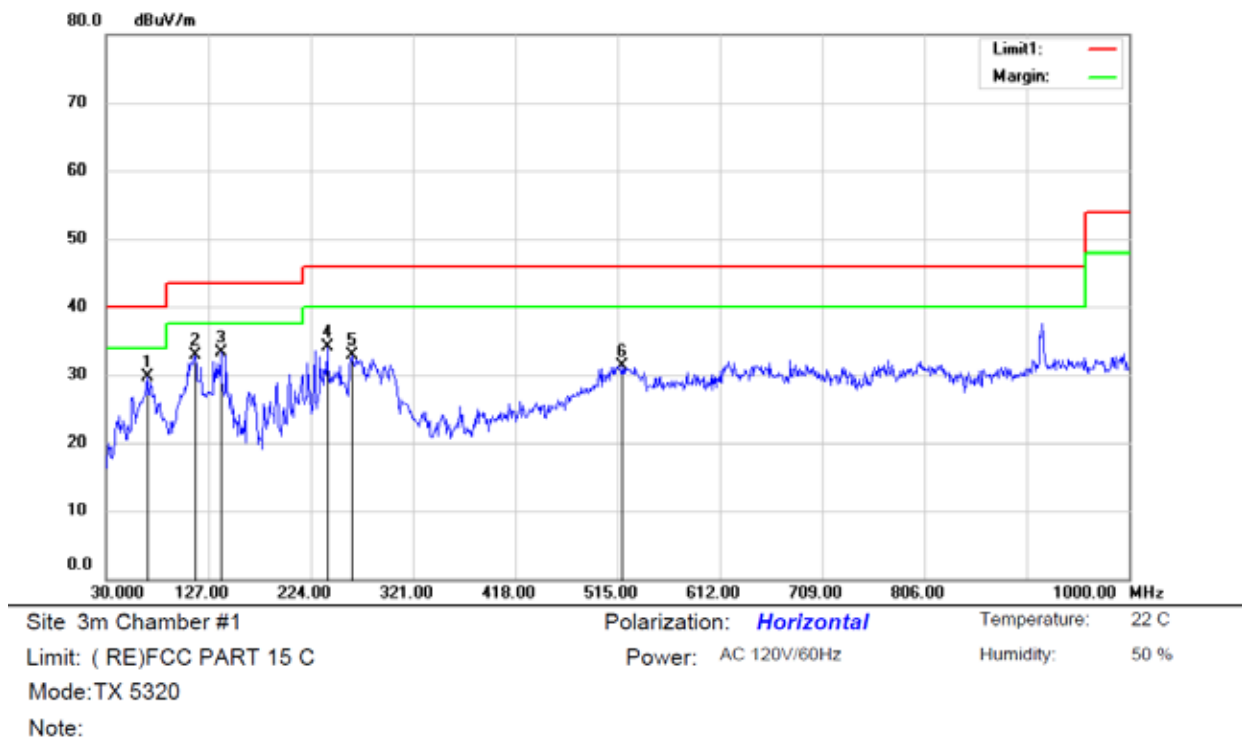
Operator: LQZ



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	75.5900	50.72	-17.06	33.66	40.00	-6.34	QP		
2		168.7100	47.68	-14.56	33.12	43.50	-10.38	QP		
3		262.8000	41.48	-10.69	30.79	46.00	-15.21	QP		
4		458.7400	40.32	-7.63	32.69	46.00	-13.31	QP		
5		554.7700	38.26	-3.90	34.36	46.00	-11.64	QP		
6		798.2400	33.86	-0.27	33.59	46.00	-12.41	QP		

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

Operator: LQZ



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		68.8000	45.33	-15.55	29.78	40.00	-10.22	QP		
2		114.3900	45.95	-13.00	32.95	43.50	-10.55	QP		
3	*	138.6400	49.38	-16.00	33.38	43.50	-10.12	QP		
4		239.5200	44.96	-10.92	34.04	46.00	-11.96	QP		
5		262.8000	43.65	-10.69	32.96	46.00	-13.04	QP		
6		519.8500	36.71	-5.33	31.38	46.00	-14.62	QP		

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

Operator: LQZ



Site 3m Chamber #1

Polarization: **Vertical**

Temperature: 22 C

Limit: (RE)FCC PART 15 C

Power: AC 120V/60Hz

Humidity: 50 %

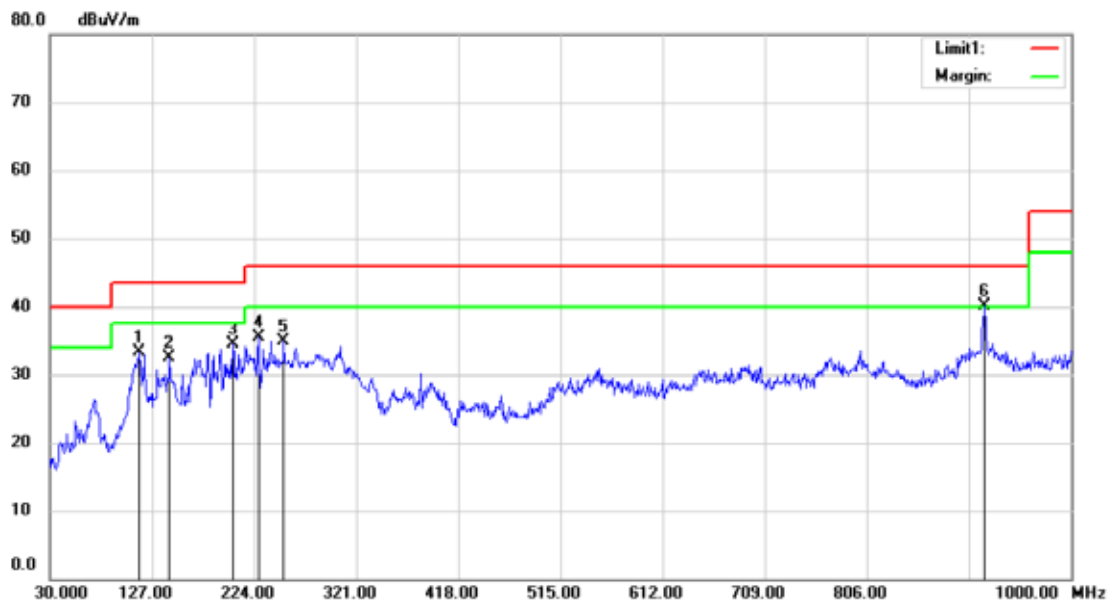
Mode:TX 5320

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	39.7000	44.01	-11.56	32.45	40.00	-7.55	QP		
2		104.6900	41.46	-11.33	30.13	43.50	-13.37	QP		
3		163.8600	49.01	-14.83	34.18	43.50	-9.32	QP		
4		559.6200	39.14	-3.93	35.21	46.00	-10.79	QP		
5		610.0600	40.04	-2.81	37.23	46.00	-8.77	QP		
6		917.5500	33.29	1.76	35.05	46.00	-10.95	QP		

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

Operator: LQZ

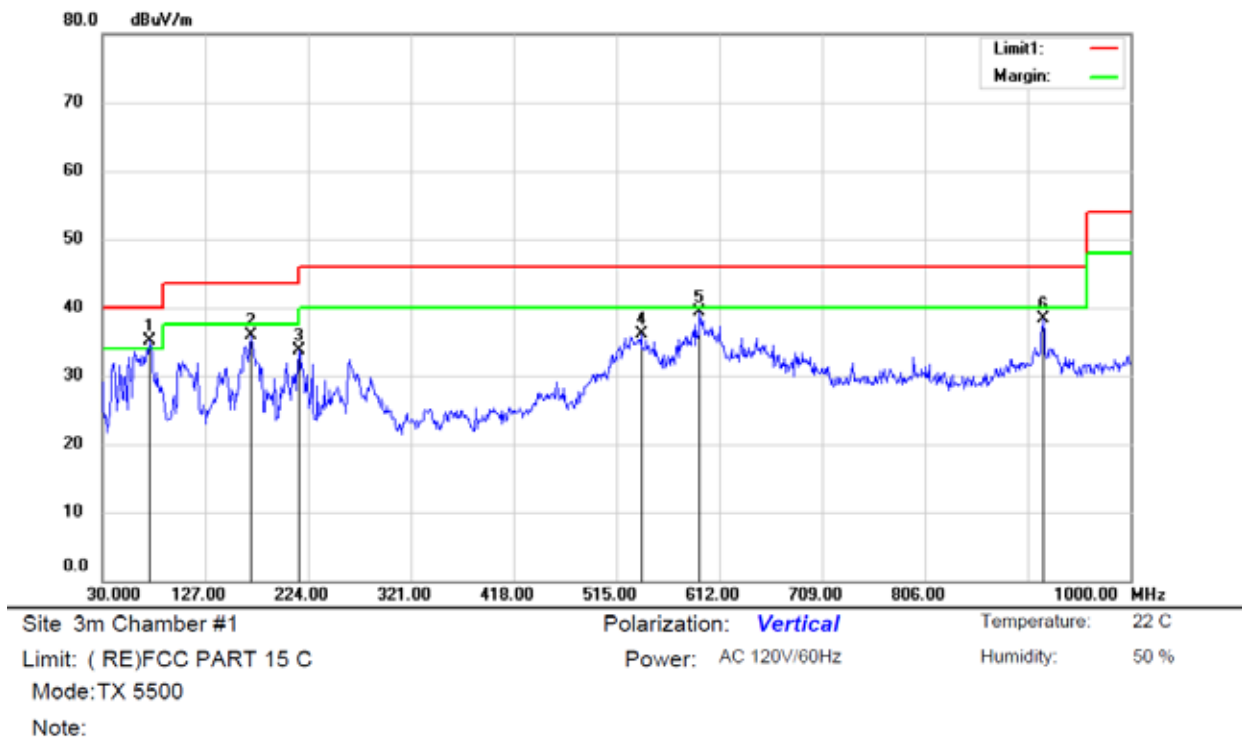


Site 3m Chamber #1 Polarization: **Horizontal** Temperature: 22 C
 Limit: (RE)FCC PART 15 C Power: AC 120V/60Hz Humidity: 50 %
 Mode:TX 5500
 Note:

No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		114.3900	46.29	-13.00	33.29	43.50	-10.21	QP		
2		143.4900	48.75	-16.22	32.53	43.50	-10.97	QP		
3		203.6300	46.97	-12.38	34.59	43.50	-8.91	QP		
4		227.8800	47.11	-11.62	35.49	46.00	-10.51	QP		
5		252.1300	45.83	-10.95	34.88	46.00	-11.12	QP		
6	*	917.5500	38.28	1.76	40.04	46.00	-5.96	QP		

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

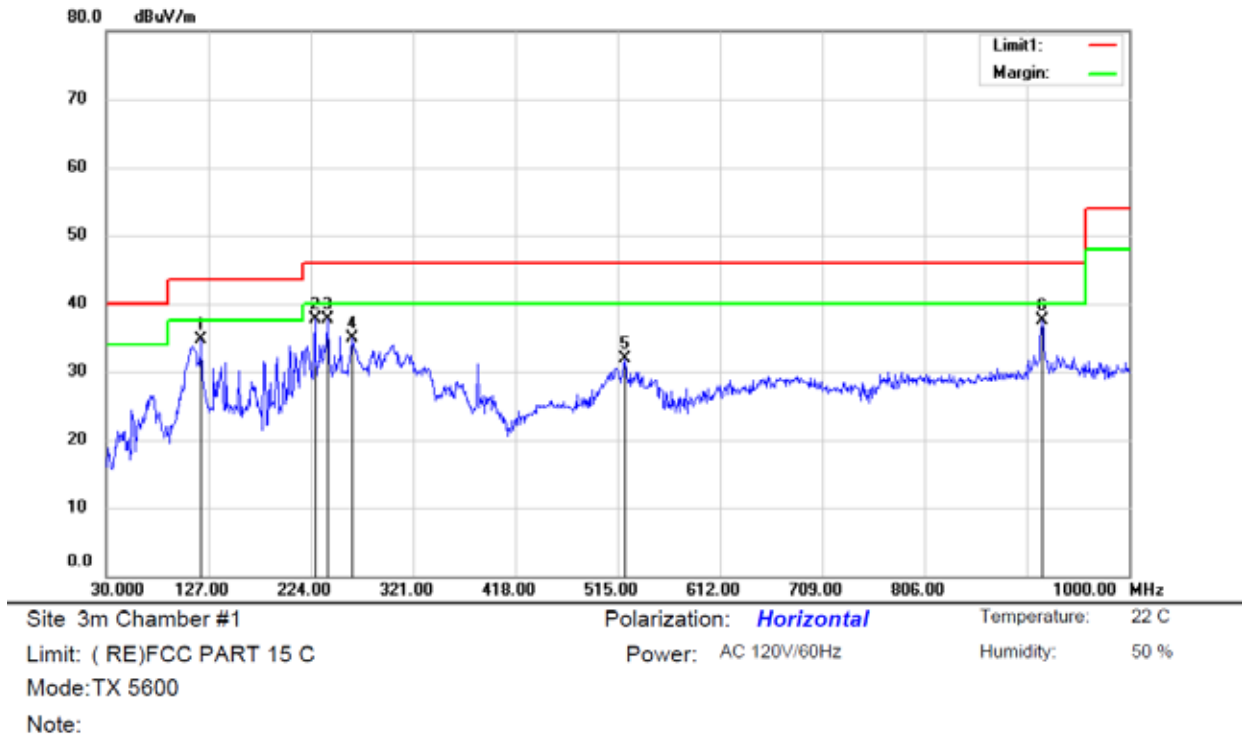
Operator: LQZ



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	74.6200	52.04	-17.02	35.02	40.00	-4.98	QP		
2		169.6800	50.42	-14.51	35.91	43.50	-7.59	QP		
3		215.2700	45.16	-11.47	33.69	43.50	-9.81	QP		
4		538.2800	40.81	-4.65	36.16	46.00	-9.84	QP		
5		593.5700	42.38	-3.17	39.21	46.00	-6.79	QP		
6		917.5500	36.64	1.76	38.40	46.00	-7.60	QP		

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

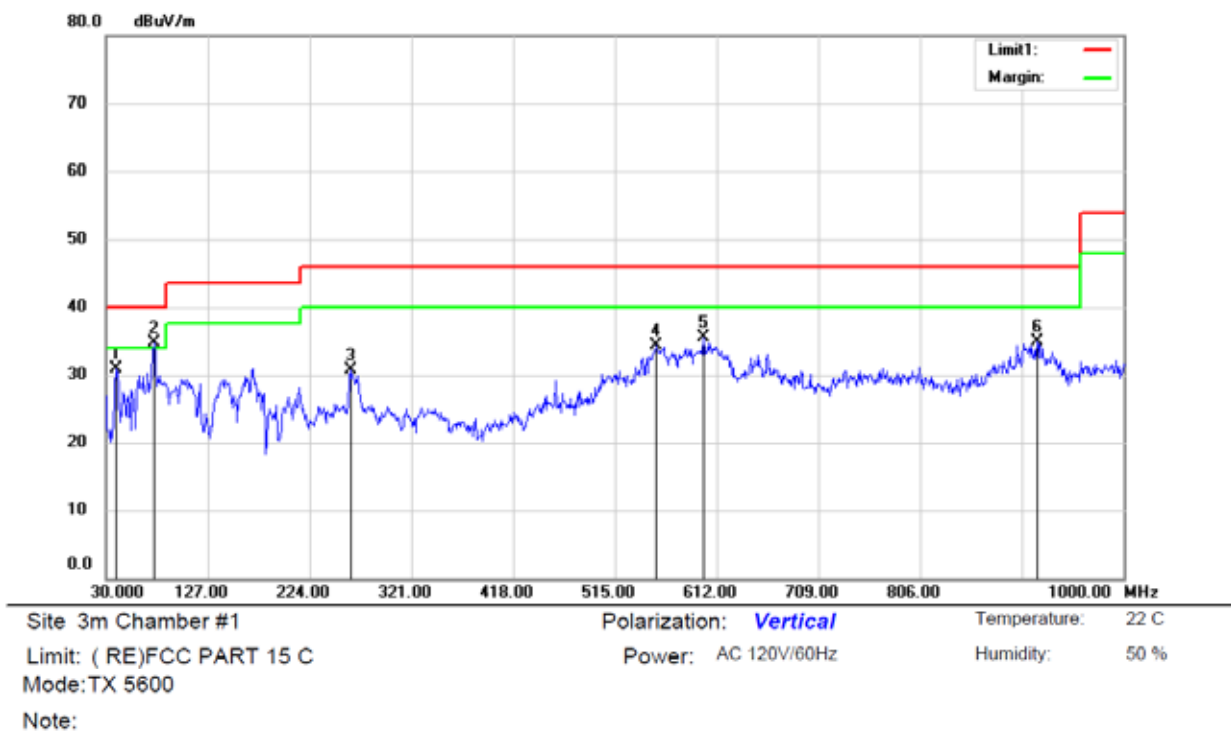
Operator: LQZ



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		120.2100	48.64	-14.02	34.62	43.50	-8.88	QP		
2	*	227.8800	49.37	-11.62	37.75	46.00	-8.25	QP		
3		239.5200	48.62	-10.92	37.70	46.00	-8.30	QP		
4		263.7700	45.67	-10.85	34.82	46.00	-11.18	QP		
5		521.7900	37.18	-5.27	31.91	46.00	-14.09	QP		
6		917.5500	35.71	1.76	37.47	46.00	-8.53	QP		

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

Operator: LQZ



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		39.7000	42.38	-11.56	30.82	40.00	-9.18	QP		
2	*	75.5900	51.72	-17.06	34.66	40.00	-5.34	QP		
3		262.8000	41.48	-10.69	30.79	46.00	-15.21	QP		
4		554.7700	38.26	-3.90	34.36	46.00	-11.64	QP		
5		599.3900	38.11	-2.69	35.42	46.00	-10.58	QP		
6		917.5500	33.19	1.76	34.95	46.00	-11.05	QP		

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

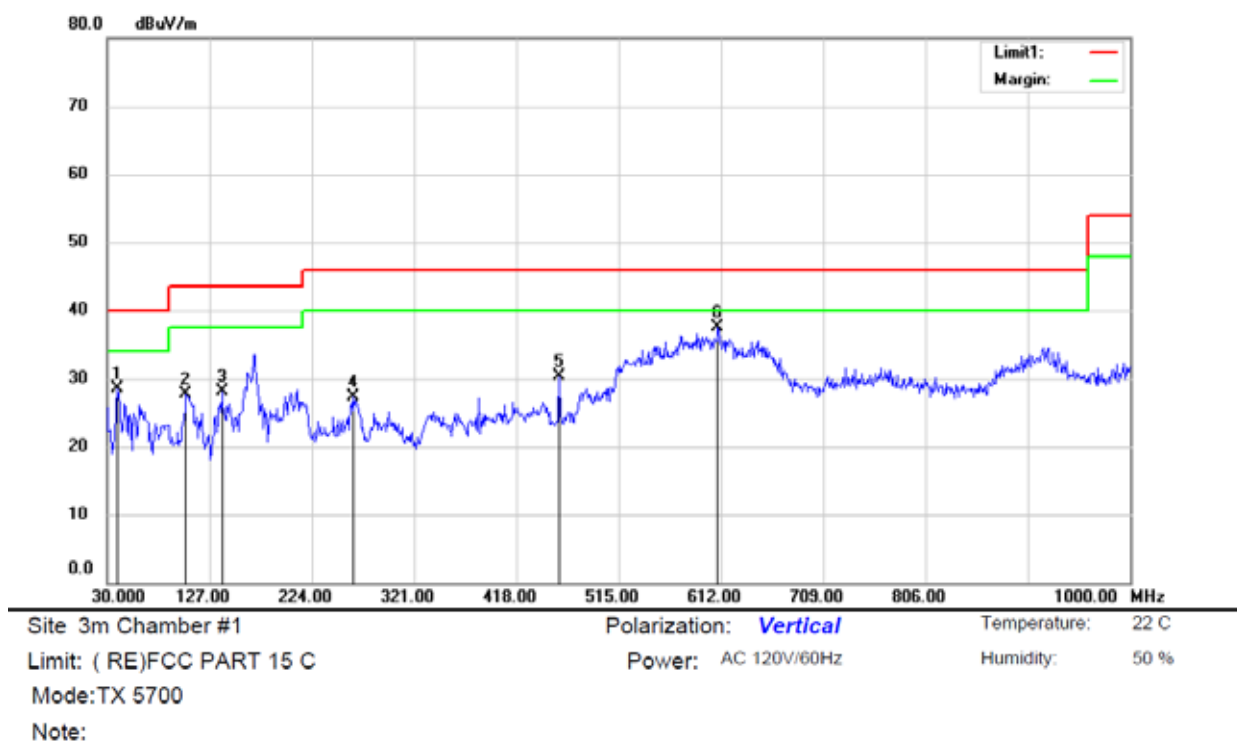
Operator: LQZ



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		114.3900	47.95	-13.00	34.95	43.50	-8.55	QP		
2		138.6400	49.38	-16.00	33.38	43.50	-10.12	QP		
3		263.7700	45.43	-10.85	34.58	46.00	-11.42	QP		
4		519.8500	37.21	-5.33	31.88	46.00	-14.12	QP		
5		678.9300	37.41	-2.29	35.12	46.00	-10.88	QP		
6	*	917.5500	36.77	1.76	38.53	46.00	-7.47	QP		

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

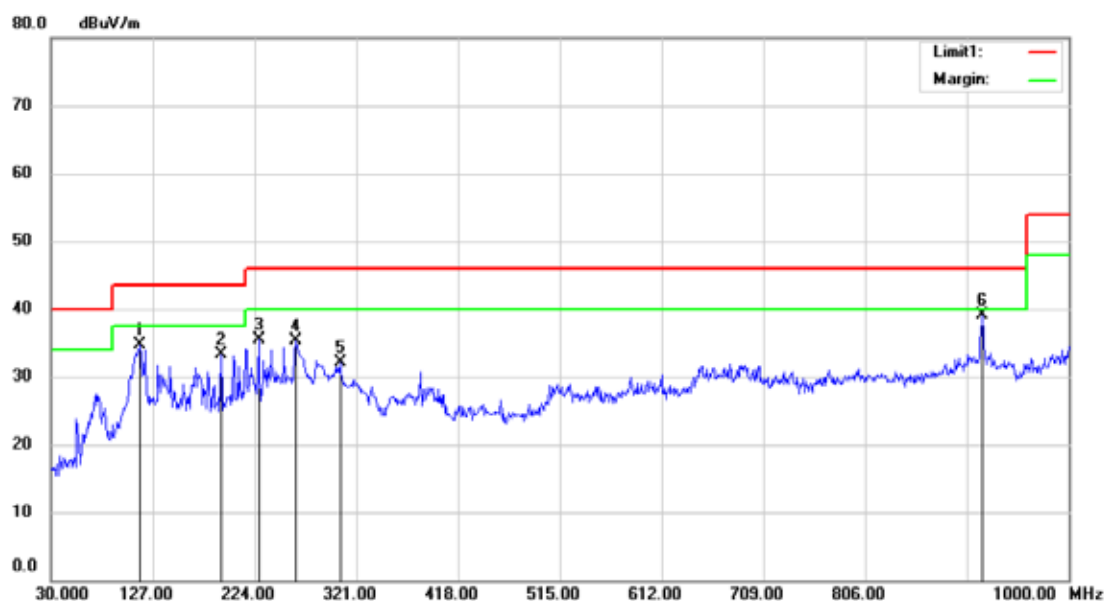
Operator: LQZ



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		39.7000	40.01	-11.56	28.45	40.00	-11.55	QP		
2		104.6900	38.96	-11.33	27.63	43.50	-15.87	QP		
3		138.6400	44.03	-16.00	28.03	43.50	-15.47	QP		
4		262.8000	37.96	-10.69	27.27	46.00	-18.73	QP		
5		458.7400	38.00	-7.63	30.37	46.00	-15.63	QP		
6	*	609.0900	40.26	-2.80	37.46	46.00	-8.54	QP		

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

Operator: LQZ

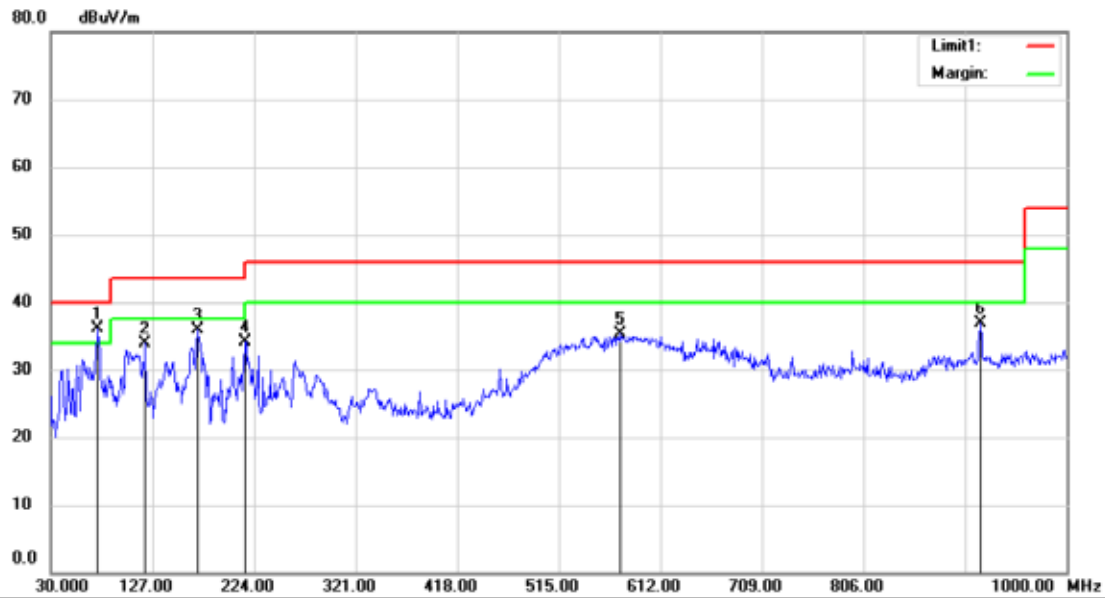


Site 3m Chamber #1 Polarization: **Horizontal** Temperature: 22 C
 Limit: (RE)FCC PART 15 C Power: AC 120V/60Hz Humidity: 50 %
 Mode:TX 5745
 Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		114.3900	47.79	-13.00	34.79	43.50	-8.71	QP		
2		191.9900	45.97	-12.75	33.22	43.50	-10.28	QP		
3		227.8800	47.11	-11.62	35.49	46.00	-10.51	QP		
4		263.7700	46.17	-10.85	35.32	46.00	-10.68	QP		
5		305.4800	42.10	-9.98	32.12	46.00	-13.88	QP		
6	*	917.5500	37.28	1.76	39.04	46.00	-6.96	QP		

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

Operator: LQZ



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1	*	74.6200	53.04	-17.02	36.02	40.00	-3.98	QP		
2		120.2100	47.95	-14.02	33.93	43.50	-9.57	QP		
3		169.6800	50.42	-14.51	35.91	43.50	-7.59	QP		
4		215.2700	45.66	-11.47	34.19	43.50	-9.31	QP		
5		574.1700	39.19	-3.96	35.23	46.00	-10.77	QP		
6		917.5500	35.14	1.76	36.90	46.00	-9.10	QP		

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

Operator: LQZ



Site 3m Chamber #1

Polarization: **Horizontal**

Temperature: 22 C

Limit: (RE)FCC PART 15 C

Power: AC 120V/60Hz

Humidity: 50 %

Mode:TX 5785

Note:

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		68.8000	43.71	-15.55	28.16	40.00	-11.84	QP		
2		112.4500	46.26	-12.58	33.68	43.50	-9.82	QP		
3		120.2100	48.14	-14.02	34.12	43.50	-9.38	QP		
4	*	227.8800	49.87	-11.62	38.25	46.00	-7.75	QP		
5		240.4900	47.77	-10.92	36.85	46.00	-9.15	QP		
6		917.5500	35.71	1.76	37.47	46.00	-8.53	QP		

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

Operator: LQZ



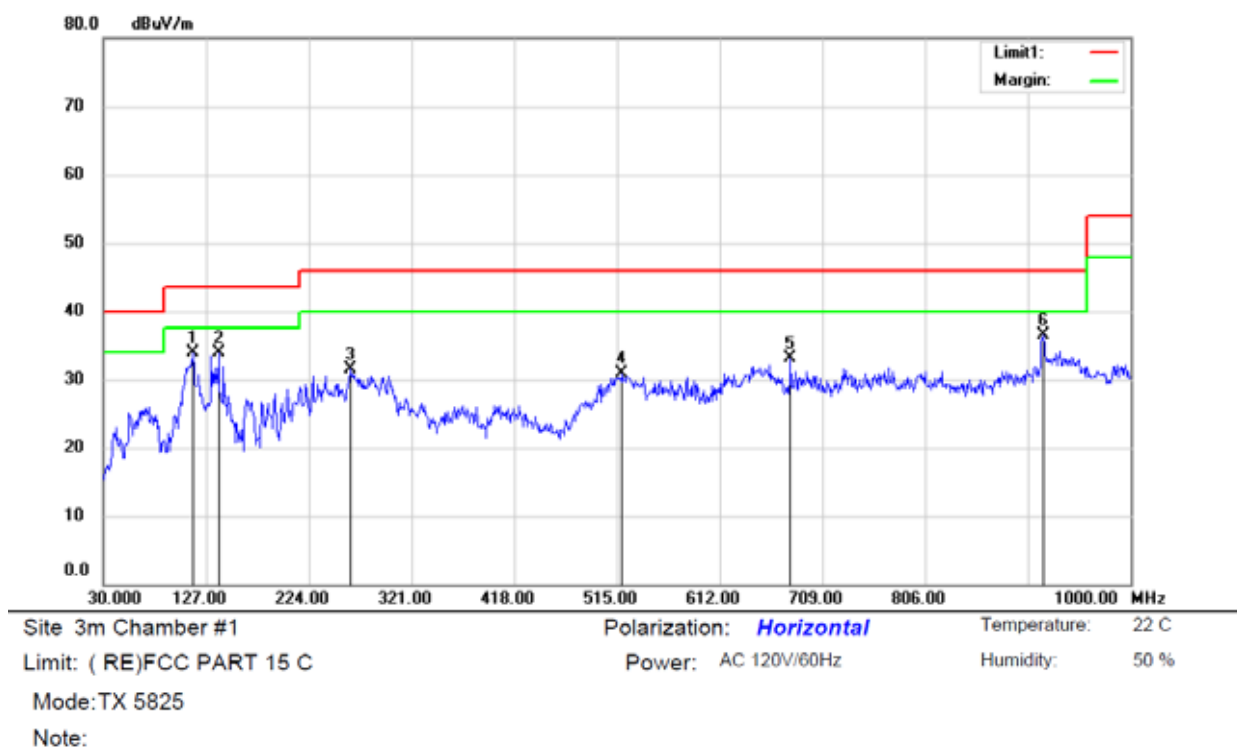
Site: 3m Chamber #1
 Limit: (RE)FCC PART 15 C
 Mode: TX 5785
 Note:

Polarization: **Vertical**
 Power: AC 120V/60Hz
 Temperature: 22 C
 Humidity: 50 %

No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1	*	75.5900	51.72	-17.06	34.66	40.00	-5.34	QP		
2		146.4000	45.43	-16.02	29.41	43.50	-14.09	QP		
3		169.6800	46.33	-14.51	31.82	43.50	-11.68	QP		
4		262.8000	40.48	-10.69	29.79	46.00	-16.21	QP		
5		541.1900	35.94	-4.49	31.45	46.00	-14.55	QP		
6		599.3900	36.11	-2.69	33.42	46.00	-12.58	QP		

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

Operator: LQZ



No.	Mk.	Freq.	Reading	Correct	Measure-	Limit	Over	Antenna	Table	
		MHz	Level	Factor	ment			Height	Degree	
			dBuV	dB	dBuV/m	dBuV/m	dB	cm	degree	Comment
1		114.3900	46.95	-13.00	33.95	43.50	-9.55	QP		
2		138.6400	49.88	-16.00	33.88	43.50	-9.62	QP		
3		263.7700	42.43	-10.85	31.58	46.00	-14.42	QP		
4		519.8500	36.21	-5.33	30.88	46.00	-15.12	QP		
5		678.9300	35.41	-2.29	33.12	46.00	-12.88	QP		
6	*	917.5500	34.77	1.76	36.53	46.00	-9.47	QP		

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

Operator: LQZ



No.	Mk.	Freq.	Reading Level	Correct Factor	Measure-ment	Limit	Over	Antenna Height	Table Degree	
		MHz	dBuV	dB	dBuV/m	dBuV/m	dB	Detector	cm	degree
1		60.0700	40.85	-11.78	29.07	40.00	-10.93	QP		
2		107.6000	40.41	-11.71	28.70	43.50	-14.80	QP		
3		168.7100	48.13	-14.56	33.57	43.50	-9.93	QP		
4		458.7400	38.50	-7.63	30.87	46.00	-15.13	QP		
5		559.6200	39.64	-3.93	35.71	46.00	-10.29	QP		
6	*	610.0600	39.04	-2.81	36.23	46.00	-9.77	QP		

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

Operator: LQZ

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.

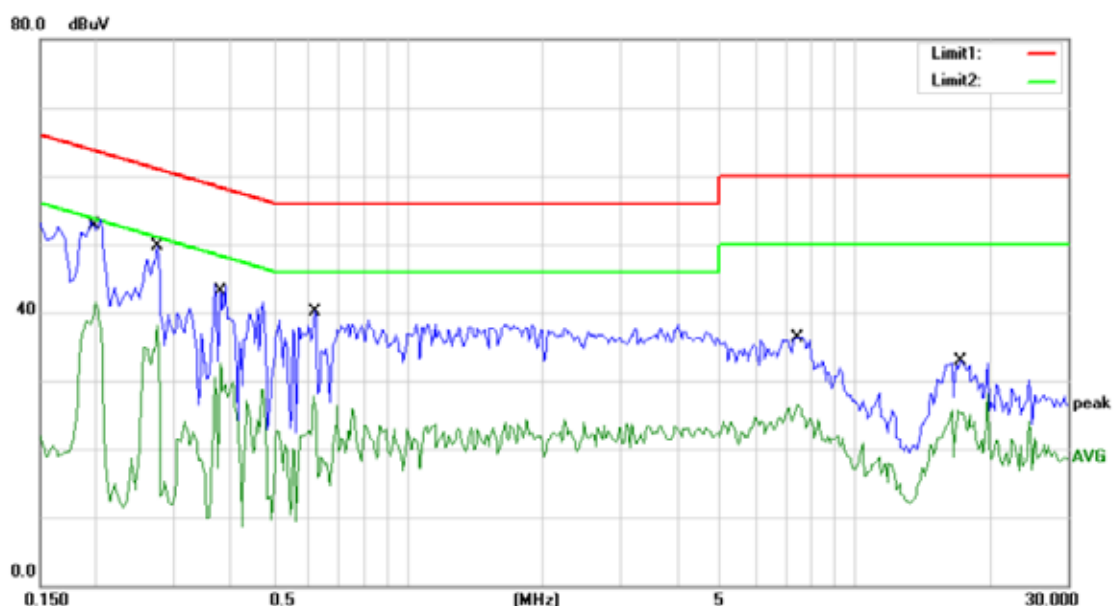
Maximum procedure was performed on the highest emissions to ensure EUT compliance.

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 result(WIFI+BT ON,120V~60Hz) as bellow.



Site Conduction #1

Phase: **L1**

Temperature: 22

Limit: (CE)FCC PART 15 C

Power: AC 120V/60Hz

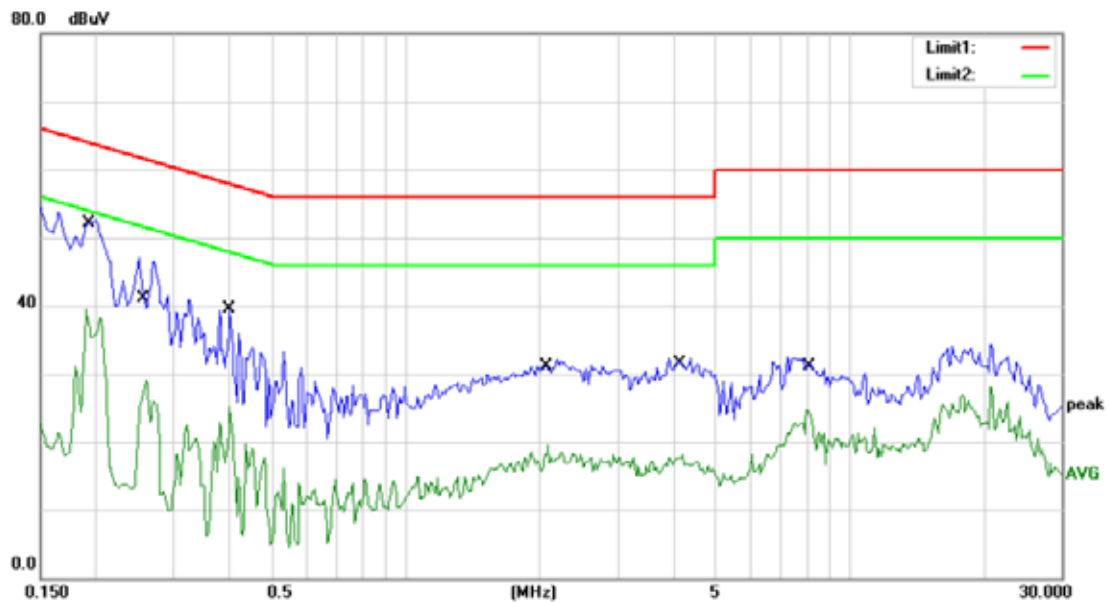
Humidity: 55 %

Mode: WIFI +BT ON

Note: Adapter model : ADS-25FSG-12 12024EPCU

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.2000	53.51	0.00	53.51	63.61	-10.10	QP	
2		0.2000	41.53	0.00	41.53	53.61	-12.08	AVG	
3		0.2750	49.71	0.00	49.71	60.97	-11.26	QP	
4		0.2750	38.04	0.00	38.04	50.97	-12.93	AVG	
5		0.3800	44.17	0.00	44.17	58.28	-14.11	QP	
6		0.3800	32.55	0.00	32.55	48.28	-15.73	AVG	
7		0.6150	40.20	0.00	40.20	56.00	-15.80	QP	
8		0.6150	27.73	0.00	27.73	46.00	-18.27	AVG	
9		7.4200	36.45	0.00	36.45	60.00	-23.55	QP	
10		7.4200	26.50	0.00	26.50	50.00	-23.50	AVG	
11		17.0500	32.88	0.00	32.88	60.00	-27.12	QP	
12		17.0500	25.63	0.00	25.63	50.00	-24.37	AVG	

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



Site Conduction #1

Phase: **N**

Temperature: 22

Limit: (CE)FCC PART 15 C

Power: AC 120V/60Hz

Humidity: 55 %

Mode: WIFI +BT ON

Note: Adapter model: ADS-25FSG-12 12024EPCU

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1	*	0.1900	52.64	0.00	52.64	64.04	-11.40	QP	
2		0.1900	39.45	0.00	39.45	54.04	-14.59	AVG	
3		0.2600	47.15	0.00	47.15	61.43	-14.28	QP	
4		0.2600	29.02	0.00	29.02	51.43	-22.41	AVG	
5		0.4000	39.52	0.00	39.52	57.85	-18.33	QP	
6		0.4000	25.06	0.00	25.06	47.85	-22.79	AVG	
7		2.0900	32.16	0.00	32.16	56.00	-23.84	QP	
8		2.0900	19.43	0.00	19.43	46.00	-26.57	AVG	
9		4.2200	32.25	0.00	32.25	56.00	-23.75	QP	
10		4.2200	18.09	0.00	18.09	46.00	-27.91	AVG	
11		7.9800	32.47	0.00	32.47	60.00	-27.53	QP	
12		7.9800	24.78	0.00	24.78	50.00	-25.22	AVG	

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



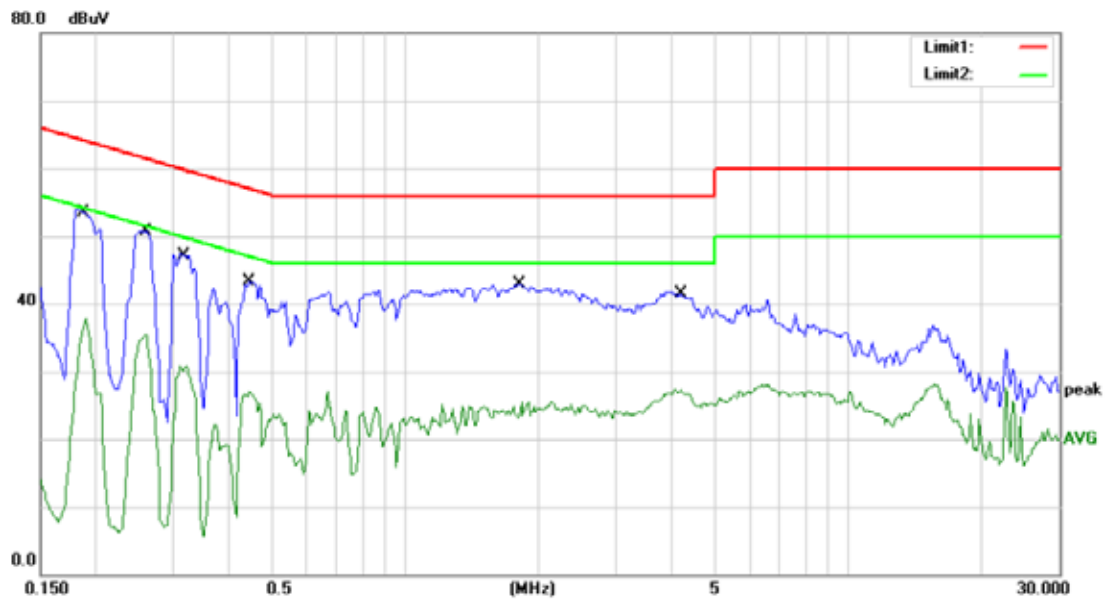
Site Conduction #1
Limit: (CE)FCC PART 15 C
Mode: WIFI +BT ON
Note: Adapter model: KSASB0241200200VU

Phase: **L1**
Power: AC 120V/60Hz

Temperature: 22
Humidity: 55 %

No.	Mk.	Freq. MHz	Reading Level dBuV	Correct Factor dB	Measure- ment dBuV	Limit dBuV	Over dB	Detector	Comment
1		0.1950	53.90	0.00	53.90	63.82	-9.92	QP	
2	*	0.1950	44.70	0.00	44.70	53.82	-9.12	AVG	
3		0.2550	50.90	0.00	50.90	61.59	-10.69	QP	
4		0.2550	40.46	0.00	40.46	51.59	-11.13	AVG	
5		0.3100	47.30	0.00	47.30	59.97	-12.67	QP	
6		0.3100	37.99	0.00	37.99	49.97	-11.98	AVG	
7		0.4500	41.30	0.00	41.30	56.88	-15.58	QP	
8		0.4500	28.23	0.00	28.23	46.88	-18.65	AVG	
9		0.6050	44.59	0.00	44.59	56.00	-11.41	QP	
10		0.6050	22.11	0.00	22.11	46.00	-23.89	AVG	
11		4.0900	38.54	0.00	38.54	56.00	-17.46	QP	
12		4.0900	21.30	0.00	21.30	46.00	-24.70	AVG	

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



Site Conduction #1 Phase: **N** Temperature: 22
 Limit: (CE)FCC PART 15 C Power: AC 120V/60Hz Humidity: 55 %
 Mode: WIFI +BT ON
 Note: Adapter model: KSASB0241200200VU

No.	Mk.	Freq.	Reading Level	Correct Factor	Measurement	Limit	Over		
		MHz	dBuV	dB	dBuV	dBuV	dB	Detector	Comment
1	*	0.1900	53.86	0.00	53.86	64.04	-10.18	QP	
2		0.1900	37.99	0.00	37.99	54.04	-16.05	AVG	
3		0.2600	50.78	0.00	50.78	61.43	-10.65	QP	
4		0.2600	35.59	0.00	35.59	51.43	-15.84	AVG	
5		0.3200	47.52	0.00	47.52	59.71	-12.19	QP	
6		0.3200	30.92	0.00	30.92	49.71	-18.79	AVG	
7		0.4450	43.21	0.00	43.21	56.97	-13.76	QP	
8		0.4450	27.10	0.00	27.10	46.97	-19.87	AVG	
9		1.8300	42.98	0.00	42.98	56.00	-13.02	QP	
10		1.8300	25.58	0.00	25.58	46.00	-20.42	AVG	
11		4.2000	41.76	0.00	41.76	56.00	-14.24	QP	
12		4.2000	27.37	0.00	27.37	46.00	-18.63	AVG	

*:Maximum data x:Over limit l:over margin Comment: Factor build in receiver. Operator: Stan

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 a FPC antenna for BT, the max gain is 2 dBi;
The EUT has two FPC antenna for WIFI, the max gain is 2 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)

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