

FCC Test Report

Product Name : Dual-band Wireless-AC600 USB Adapter

Trade Name : ASUS

Model No. : USB-AC51

FCC ID. : MSQUSBAC51

Applicant : ASUSTeK COMPUTER INC.

Address : 4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan

Date of Receipt : Feb. 01, 2016

Issued Date : Apr. 18, 2016

Report No. : 1620123R-RFUSP57V00

Report Version : V1.0



The test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of QuieTek Corporation.

Test Report Certification

Issued Date : Apr. 18, 2016

Report No. : 1620123R-RFUSP57V00

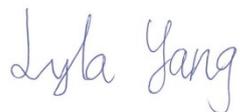


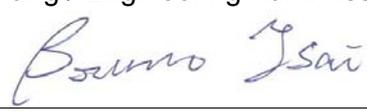
a  DEKRA company

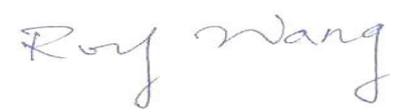
Product Name : Dual-band Wireless-AC600 USB Adapter
 Applicant : ASUSTeK COMPUTER INC.
 Address : 4F, No. 150, Li-Te Rd., Peitou, Taipei, Taiwan
 Manufacturer : ASUSTeK COMPUTER INC.
 Model No. : USB-AC51
 FCC ID. : MSQUSBAC51
 EUT Voltage : DC 5V(Power by PC)
 Testing Voltage : DC 5V(Power by PC)
 Trade Name : ASUS
 Applicable Standard : FCC CFR Title 47 Part 15 Subpart E Section 15.407: 2015
 ANSI C63.10: 2009
 Test Lab : Quietek Hsin Chu Laboratory
 Test Result : Complied

The test results relate only to the samples tested.

The test report shall not be reproduced except in full without the written approval of Quietek Corporation.

Documented By : 

 (Lyla Yang / Engineering Adm. Assistant)
 Reviewed By : 

 (Bruno Tsai / Engineer)
 Approved By : 

 (Roy Wang / Director)

Revision History

Report No.	Version	Description	Issued Date
137219R-RFUSP42V01	V2.0	Initial issue of report	Dec 04, 2013
1620123R-RFUSP57V00	V1.0	Update WLAN 5G band 4 standard to FCC 15.407 and verify Power Density, Frequency Stability tested. The WLAN 2.4G test data, please refer to the 137219R-RFUSP42V01.	Apr. 18, 2016

Laboratory Information

We, **QuieTek Corporation**, are an independent RF consultancy that was established the whole facility in our laboratories. The test facility has been accredited/accepted (audited or listed) by the following related bodies in compliance with ISO 17025 specified testing scopes:

Taiwan R.O.C. : TAF, Accreditation Number: 3024
USA : FCC, Registration Number: 365520
Canada : IC, Submission No: 181665 / IC Registration Number: 4075C-4

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site:<http://www.quietek.com/english/about/certificates.aspx?bval=5>

The address and introduction of QuieTek Corporation's laboratories can be founded in our Web site : http://www.quietek.com/index_en.aspx

If you have any comments, Please don't hesitate to contact us. Our contact information is as below:

HsinChu Testing Laboratory:

No.75-2, 3rd Lin, Wangye Keng, Yonghxing Tsuen, Qionglin Shiang, Hsinchu County 307, Taiwan, R.O.C.
TEL:+886-3-592-8858 / FAX:+886-3-592-8859 E-Mail : service@quietek.com

LinKou Testing Laboratory:

No.5-22, Ruishukeng, Linkou Dist., New Taipei City 24451, Taiwan, R.O.C.
TEL : 886-2-8601-3788 / FAX : 886-2-8601-3789 E-Mail : service@quietek.com

TABLE OF CONTENTS

Description	Page
1. General Information.....	6
1.1. EUT Description.....	6
1.2. Test Mode	11
1.3. Tested System Details	12
1.4. Configuration of tested System	13
1.5. EUT Exercise Software.....	13
1.6. Test Facility	14
2. Peak Power Spectrum Density	15
2.1. Test Equipment	15
2.2. Test Setup.....	15
2.3. Limits.....	16
2.4. Test Procedure.....	16
2.5. Uncertainty.....	16
2.6. Test Result	17
3. Frequency Stability.....	24
3.1. Test Equipment	24
3.2. Test Setup.....	24
3.3. Limits.....	24
3.4. Test Procedure.....	24
3.5. Uncertainty.....	24
3.6. Test Result	25
Attachment 1	32
Original Report.....	32

1. General Information

1.1. EUT Description

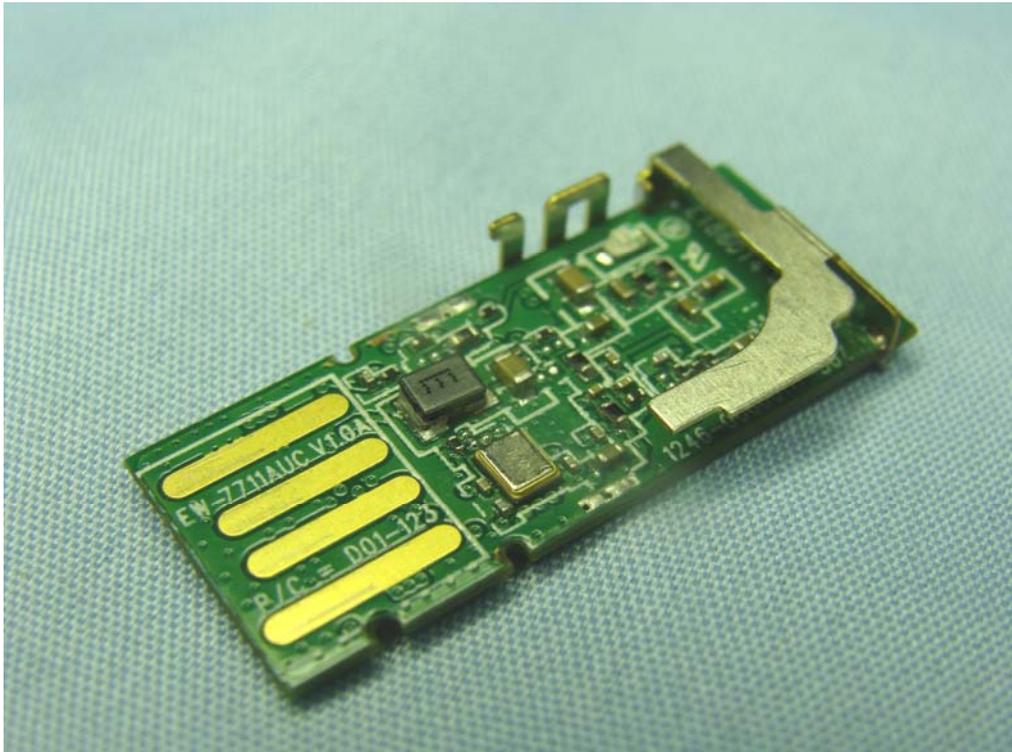
Product Name	Dual-band Wireless-AC600 USB Adapter	
Trade Name	ASUS	
Model No.	USB-AC51	
Frequency Range/ Channel Number	IEEE 802.11a/ IEEE 802.11n (20MHz) / IEEE 802.11ac (20MHz)	5745~5825MHz / 5 Channels
	IEEE 802.11n (40MHz) / IEEE 802.11ac (40MHz)	5755~5795MHz / 2 Channels
	IEEE 802.11ac (80MHz)	5775~5775MHz / 1 Channel
Type of Modulation	IEEE 802.11a/n	Orthogonal Frequency Division Multiplexing
Data Speed	IEEE 802.11a	6, 9, 18, 24, 36, 48,54Mbps
	IEEE 802.11n	Support a subset of the combination of GI, MCS 0~MCS 7 and bandwidth defined in 802.11n
	IEEE 802.11ac	Support a subset of the combination of GI, MCS 0~MCS 9 and bandwidth defined in 802.11ac

Antenna Information	
Antenna Type	PIFA Antenna
Antenna Gain	4.56dBi

ANT-TX / RX & Bandwidth

ANT-TX / RX	TX			RX		
	20MHz	40MHz	80MHz	20MHz	40MHz	80MHz
IEEE802.11a	✓			✓		
IEEE802.11n	✓	✓		✓	✓	
IEEE802.11ac	✓	✓	✓	✓	✓	✓

1TX / 1RX



IEEE 802.11n

MCS Index	Modulation	R	N _{BPSCS}	N _{CBPS}		N _{DBPS}		Data Rate(Mb/s)			
				20MHz	40MHz	20MHz	40MHz	800ns GI		400ns GI	
								20MHz	40MHz	20MHz	40MHz
0	BPSK	1/2	1	52	108	26	54	6.5	13.5	7.2	15.0
1	QPSK	1/2	2	104	216	52	108	13.0	27.0	14.4	30.0
2	QPSK	3/4	2	104	216	78	162	19.5	40.5	21.7	45.0
3	16-QAM	1/2	4	208	432	104	216	26.0	54.0	28.9	60.0
4	16-QAM	3/4	4	208	432	156	324	39.0	81.0	43.3	90.0
5	64-QAM	2/3	6	312	648	208	432	52.0	108.0	57.8	120.0
6	64-QAM	3/4	6	312	648	234	486	58.5	121.5	65.0	135.0
7	64-QAM	5/6	6	312	648	260	540	65.0	135.0	72.2	150.0

Note 1: Support of 400ns GI is optional on transmit and receive.

Table 1 – MCS parameters for TX Antenna number = 1

Symbol	Explanation
R	Code rate
N _{BPSC}	Number of coded bits per single carrier
N _{CBPS}	Number of coded bits per symbol
N _{DBPS}	Number of data bits per symbol
GI	guard interval

IEEE 802.11ac Data Rate

Spatial Streams (Note1)	MCS Index	Modulation type	Coding rate	Data Rate(Mb/s)							
				20 MHz		40 MHz		80 MHz		160 MHz	
				Guard Interval		Guard Interval		Guard Interval		Guard Interval	
				800ns	400ns	800ns	400ns	800ns	400ns	800ns	400ns
1	0	BPSK	1/2	6.5	7.2	13.5	15	29.3	32.5	58.5	65
	1	QPSK	1/2	13	14.4	27	30	58.5	65	117	130
	2	QPSK	3/4	19.5	21.7	40.5	45	87.8	97.5	175.5	195
	3	16-QAM	1/2	26	28.9	54	60	117	130	234	260
	4	16-QAM	3/4	39	43.3	81	90	175.5	195	351	390
	5	64-QAM	2/3	52	57.8	108	120	234	260	468	520
	6	64-QAM	3/4	58.5	65	121.5	135	263.3	292.5	526.5	585
	7	64-QAM	5/6	65	72.2	135	150	292.5	325	585	650
	8	256-QAM	3/4	78	86.7	162	180	351	390	702	780
	9	256-QAM	5/6	N/A	N/A	180	200	390	433.3	780	866.7

IEEE 802.11a & IEEE 802.11n (20MHz) & IEEE 802.11ac (20MHz)

Working Frequency of Each Channel							
Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
149	5745 MHz	153	5765 MHz	157	5785 MHz	161	5805 MHz
165	5825 MHz						

IEEE 802.11n (40MHz) & IEEE 802.11ac (40MHz)

Working Frequency of Each Channel			
Channel	Frequency	Channel	Frequency
151	5755 MHz	159	5795 MHz

IEEE 802.11ac (80MHz)

Working Frequency of Each Channel	
Channel	Frequency
155	5775 MHz

Note:

1. This device is a Dual-band Wireless-AC600 USB Adapter including 2.4GHz b/g/n (1x1) and 5GHz a/n/ac (1x1) transmitting and receiving function.
2. These test results on a sample of the device are for the purpose of demonstrating Compliance with Part 15 Subpart E Paragraph 15.407.
3. Regards to the frequency band operation; the lowest, middle and highest frequency of channel were selected to perform the test, and then shown on this report.
4. The function of the 2.4GHz & 5.2GHz transmitting is measured and makes a test report of the report number: 137219R-RFUSP42V01 & 1620123R-RFUSP54V00.
5. This device has USB and Ethernet ports, which can be connected to computer. It is a Class B personal computer and peripheral. Its test report number is 137219R-RFUSP37V02.

1.2. Test Mode

Quietek has verified the construction and function in typical operation. The preliminary tests were performed in different data rate, and to find the worst condition, which was shown in this test report. The following table is the final test mode.

TX	Mode 1: Transmit
----	------------------

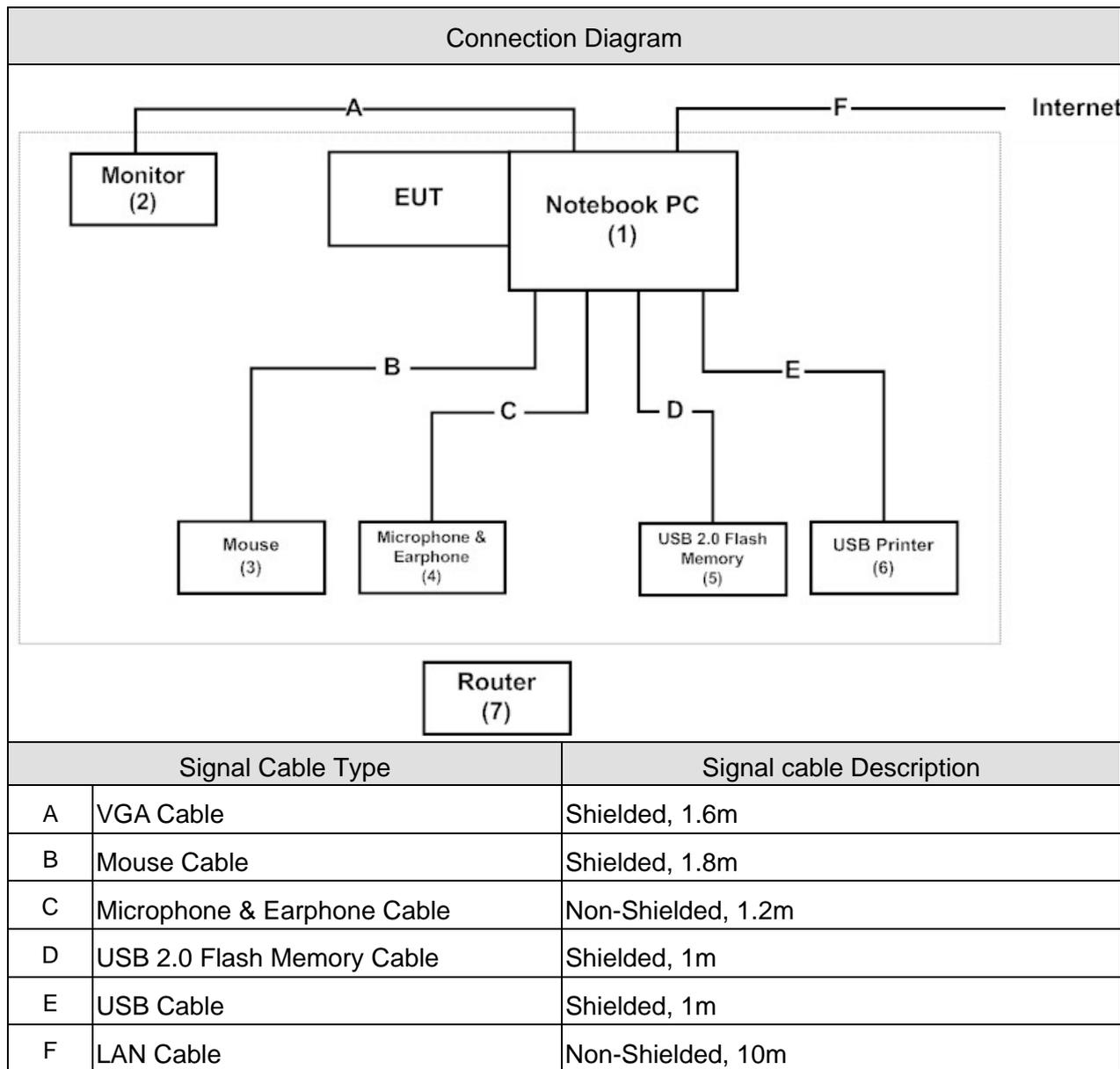
Test Items	Modulation	Channel	Antenna	Result
Conducted Emission	11ac(80MHz)	155	0	N/A
99 % & 26dB Bandwidth	a	149/ 157/ 165	0	N/A
	11n/ac (20MHz)	149/ 157/ 165	0	N/A
	11n/ac (40MHz)	151/ 159	0	N/A
	11ac (80MHz)	155	0	N/A
Peak Transmit Output	a	149/ 157/ 165	0	N/A
	11n/ac (20MHz)	149/ 157/ 165	0	N/A
	11n/ac (40MHz)	151/ 159	0	N/A
	11ac (80MHz)	155	0	N/A
Peak Power Spectrum Density	a	149/ 157/ 165	0	Complies
	11n/ac (20MHz)	149/ 157/ 165	0	Complies
	11n/ac (40MHz)	151/ 159	0	Complies
	11ac (80MHz)	155	0	Complies
Radiated Emission	a	149/ 157/ 165	0	N/A
	11n/ac (20MHz)	149/ 157/ 165	0	N/A
	11n/ac (40MHz)	151/ 159	0	N/A
	11ac (80MHz)	155	0	N/A
Band Edge	a	149/ 157/ 165	0	N/A
	11n/ac (20MHz)	149/ 157/ 165	0	N/A
	11n/ac (40MHz)	151/ 159	0	N/A
	11ac (80MHz)	155	0	N/A
RF antenna conducted test	a	149/ 157/ 165	0	N/A
	11n/ac (20MHz)	149/ 157/ 165	0	N/A
	11n/ac (40MHz)	151/ 159	0	N/A
	11ac (80MHz)	155	0	N/A
Frequency Stability	a	149/ 157/ 165	0	Complies
	11n/ac (20MHz)	149/ 157/ 165	0	Complies
	11n/ac (40MHz)	151/ 159	0	Complies
	11ac (80MHz)	155	0	Complies

1.3. Tested System Details

The types for all equipments, plus descriptions of all cables used in the tested system (including inserted cards) are:

Product	Manufacturer	Model No.	Serial No.	FCC ID	Power Cord	
1	Notebook PC	DELL	PP26L	66TLZ1S	DoC	Non-Shielded, 1.8m
2	Monitor	DELL	U2410f	082WXD-72872-1 6R-0V7L	DoC	Non-Shielded, 1.8m
3	Mouse	Logitech	M-SBF83	HCA52200185	DoC	--
4	Microphone & Earphone	Fujiei	SBZ-38	N/A	DoC	--
5	USB 2.0 Flash Memory	Apacer	AH223	N/A	DoC	--
6	USB Printer	HP	Deskjet5652	N/A	DoC	--
7	Router	Asus	RT-N10	N/A	DoC	--

1.4. Configuration of tested System



1.5. EUT Exercise Software

1	Test system is in accord with EUT user manual (refer to 1.4 configuration of tested system)
2	Turn on the power of all equipment.
3	Execute the“MT76xxU QA V2.0.5.0” on the EUT.
4	Configure the test mode, the test channel, and the data rate.
5	Press “Start TX” to start the continuous transmitting.
6	Verify that the EUT works properly.

1.6. Test Facility

Ambient conditions in the laboratory:

Items	Test Item	Required (IEC 68-1)	Actual
Temperature (°C)	FCC PART 15 E 15.407	15 - 35	25°C
Humidity (%RH)	Peak Power Spectrum	25 - 75	45%RH
Barometric pressure (mbar)	Density	860 - 1060	950-1000
Temperature (°C)	FCC PART 15 E 15.407	15 - 35	25°C
Humidity (%RH)	Frequency Stability	25 - 75	45%RH
Barometric pressure (mbar)		860 - 1060	950-1000

2. Peak Power Spectrum Density

2.1. Test Equipment

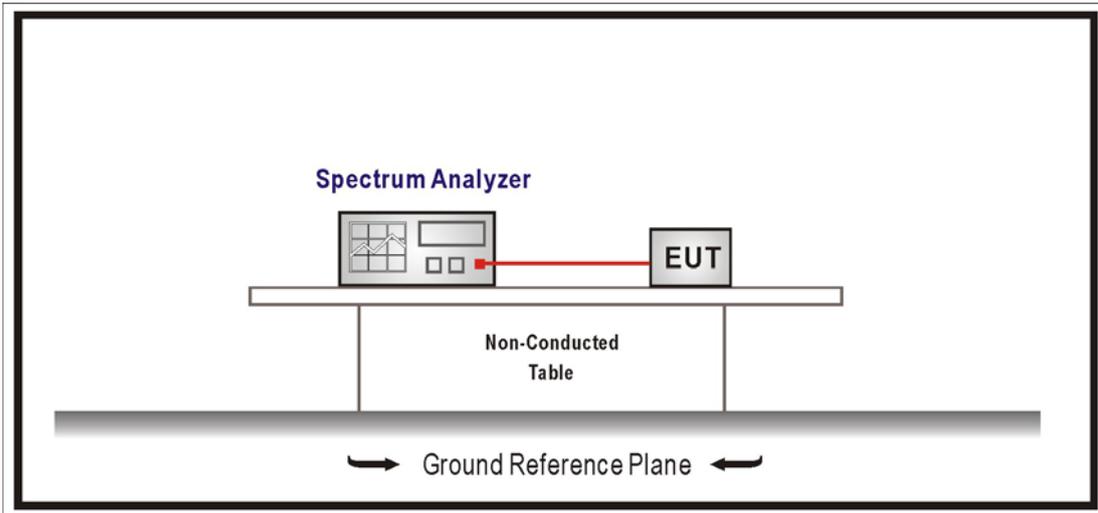
The following test equipments are used during the radiated emission tests:

Peak Power Spectrum Density / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/08/23
Signal & Spectrum Analyzer	R&S	FSV40	101049	2017/01/05
Signal Analyzer	R&S	FSV7	101650	2016/11/30

Note: All equipments that need to calibrate are with calibration period of 1 year.

2.2. Test Setup



2.3. Limits

1. For the band 5.15-5.25 GHz, the peak power spectral density shall not exceed 17 dBm in any 1MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
2. For client devices in the 5.15-5.25 GHz band, the maximum power spectral density shall not exceed 11 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, both the maximum conducted output power and the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi
3. For the band 5.25-5.35 GHz, the peak power spectral density shall not exceed 11 dBm in any 1-MHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.
4. For the band 5.725-5.850 GHz, the peak power spectral density shall not exceed 30 dBm in any 500KHz band. If transmitting antenna of directional gain greater than 6 dBi are used, the peak power spectral density shall be reduced by the amount in dB that directional gain of the antenna exceeds 6 dBi.

2.4. Test Procedure

The EUT was setup to ANSI C63.10:2009; tested to U-NII test procedure of KDB 789033 D02 for compliance to FCC 47CFR Subpart E requirements.

For Band1 : Set RBW=1MHz, VBW=3MHz with RMS detector. The PPSD is the highest level found across the emission in any 1-MHz band after 100 sweeps of averaging.

For Band4 : Set RBW=500KHz, VBW=1.5MHz with RMS detector. The PPSD is the highest level found across the emission in any 500KHz band after 100 sweeps of averaging.

2.5. Uncertainty

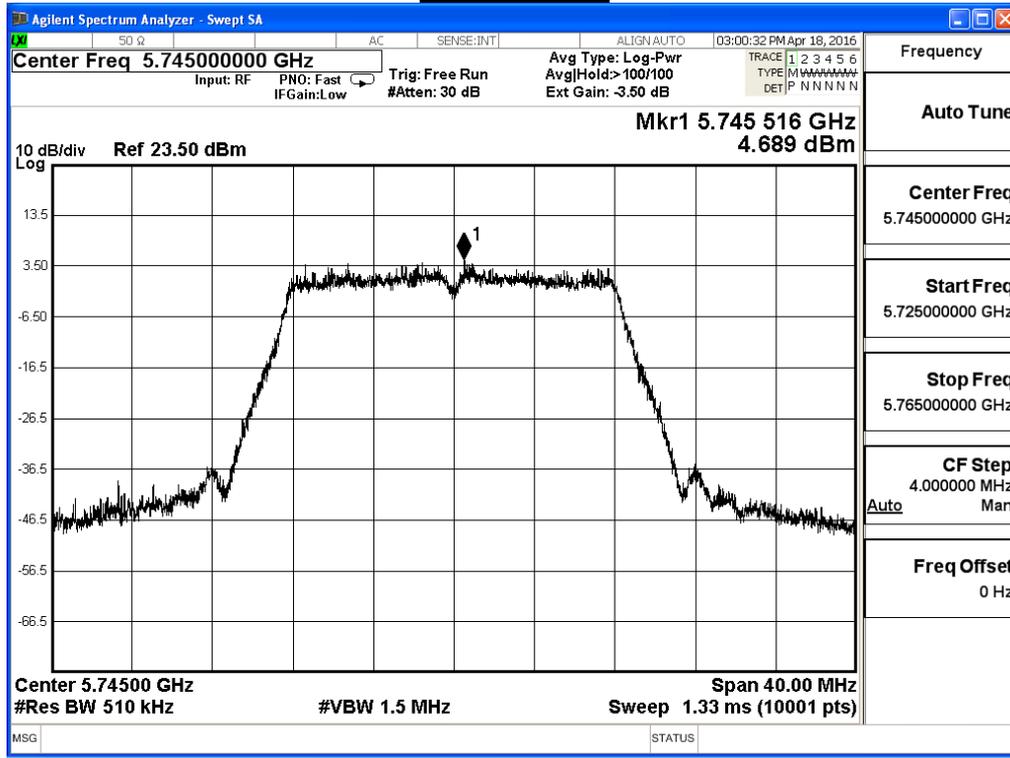
The measurement uncertainty is defined as ± 1.27 dB

2.6. Test Result

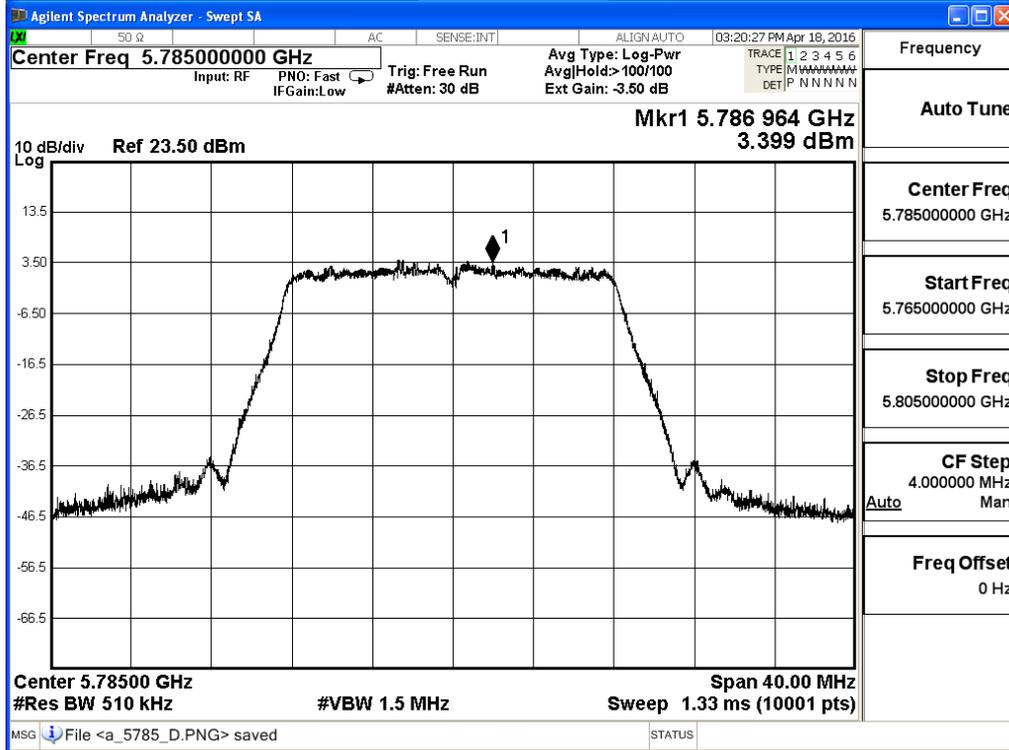
Product	Dual-band Wireless-AC600 USB Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2016/04/14	Test Site	SR7

IEEE 802.11a (ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
149	5745	4.689	≤ 30
157	5785	3.399	≤ 30
165	5825	3.465	≤ 30

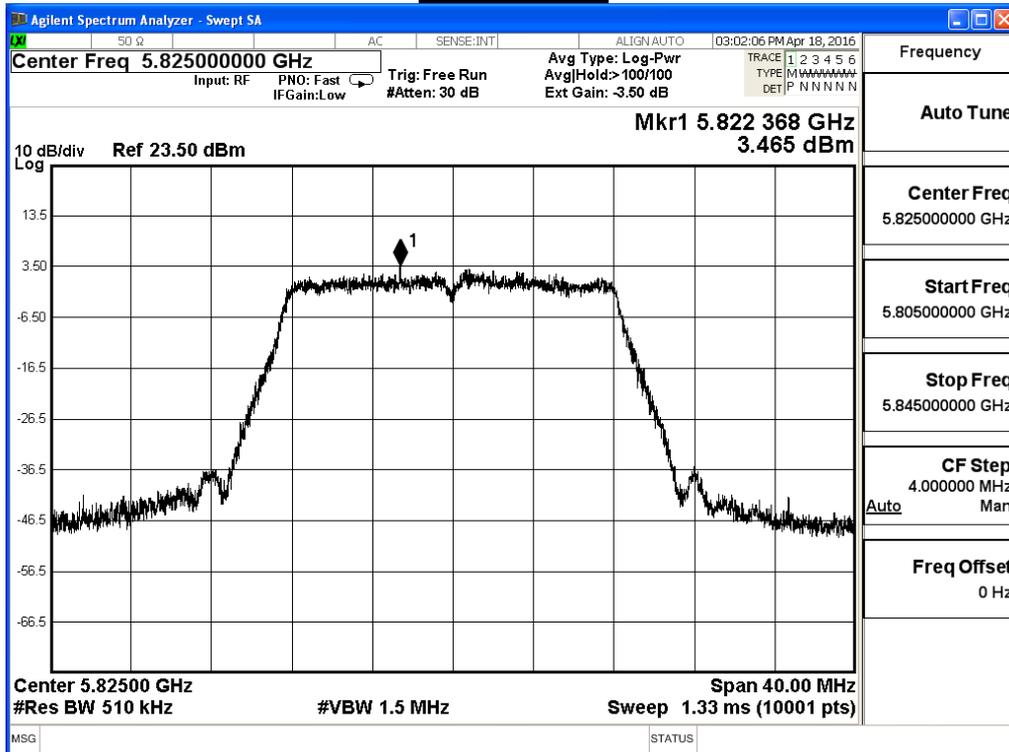
Channel 149



Channel 157



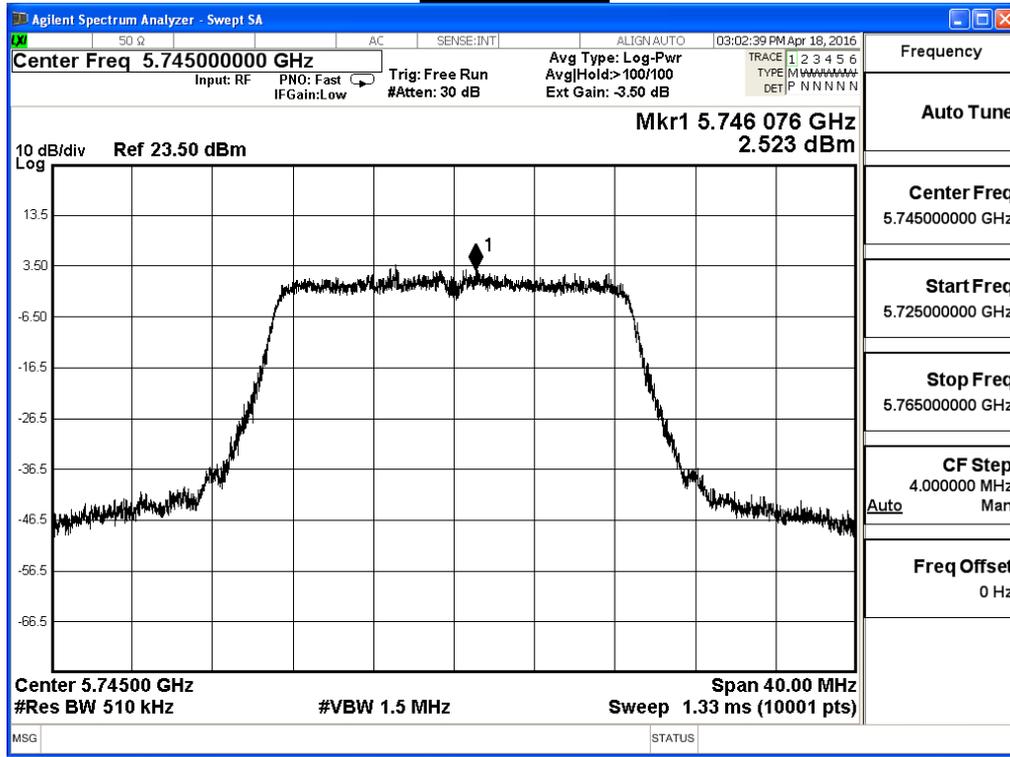
Channel 165



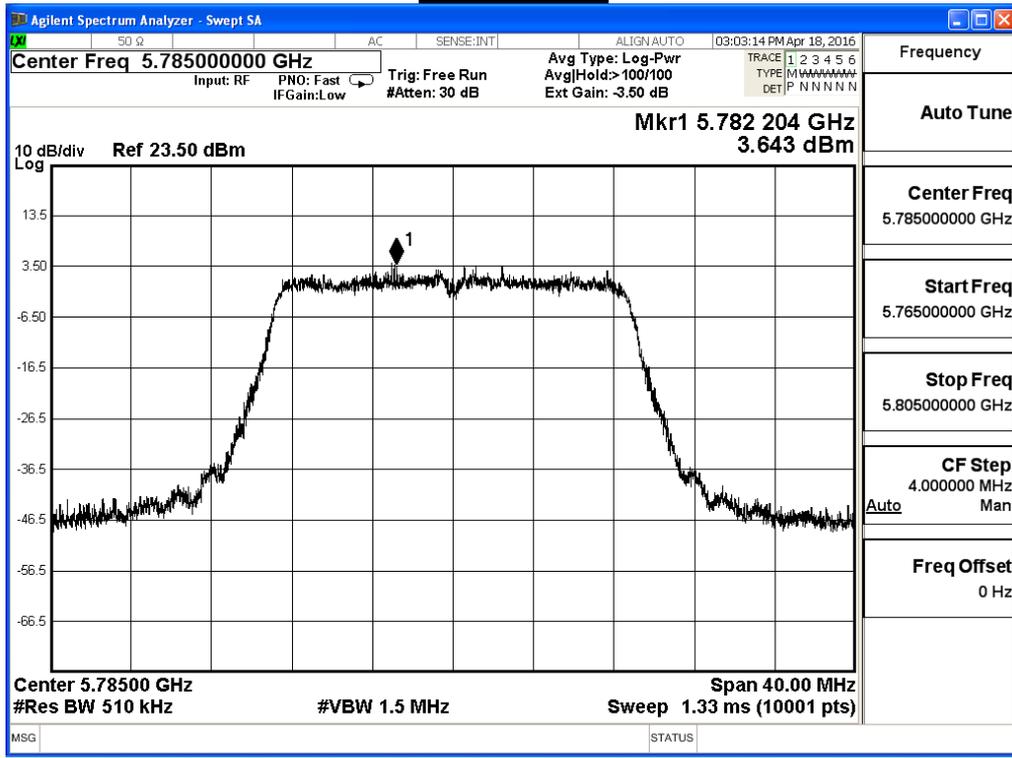
Product	Dual-band Wireless-AC600 USB Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2016/04/14	Test Site	SR7

IEEE802.11n_20MHz_(ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
149	5745	2.523	≤ 30
157	5785	3.643	≤ 30
165	5825	2.129	≤ 30

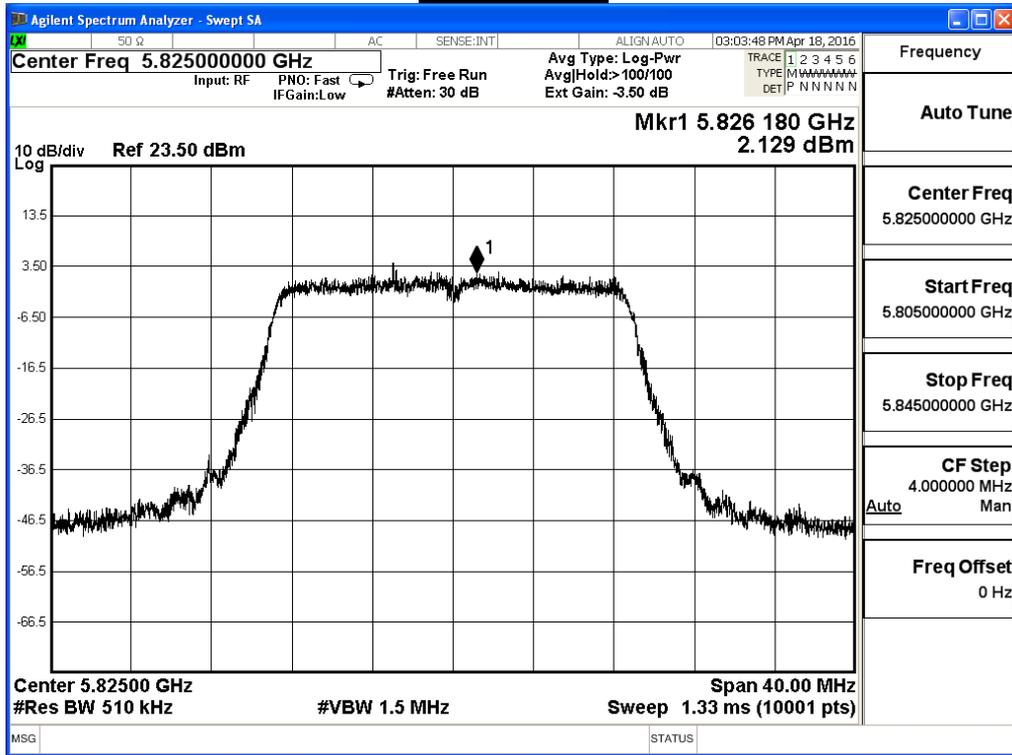
Channel 149



Channel 157



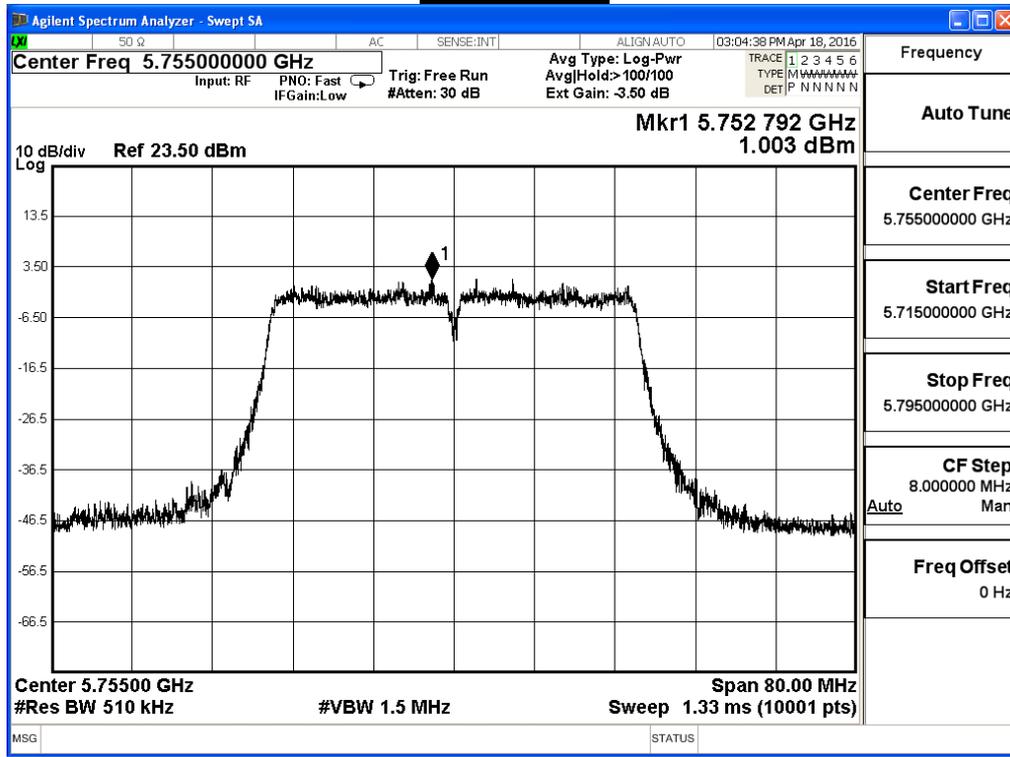
Channel 165



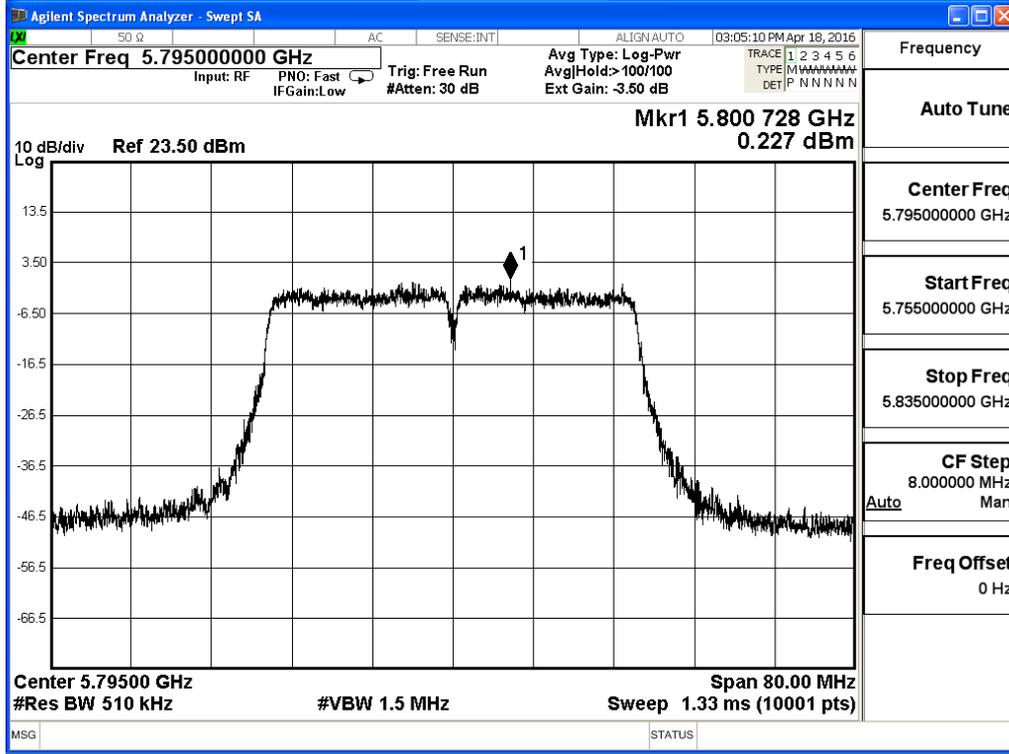
Product	Dual-band Wireless-AC600 USB Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2016/04/14	Test Site	SR7

IEEE 802.11n_40MHz (ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
151	5755	1.003	≤30
159	5795	0.227	≤30

Channel 151



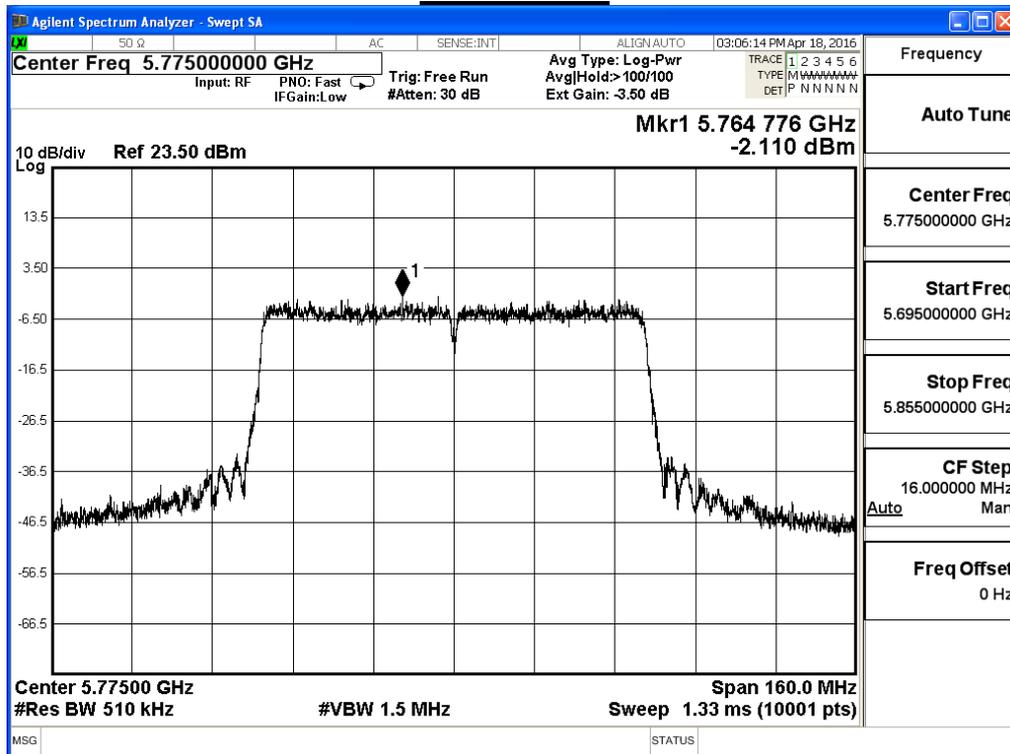
Channel 159



Product	Dual-band Wireless-AC600 USB Adapter		
Test Item	Peak Power Spectral Density		
Test Mode	Mode 1: Transmit		
Date of Test	2016/04/14	Test Site	SR7

IEEE 802.11ac_80MHz (ANT 0)			
Channel No.	Frequency (MHz)	Measure Level (dBm)	Limit (dBm)
155	5775	-2.110	≤ 30

Channel 155



3. Frequency Stability

3.1. Test Equipment

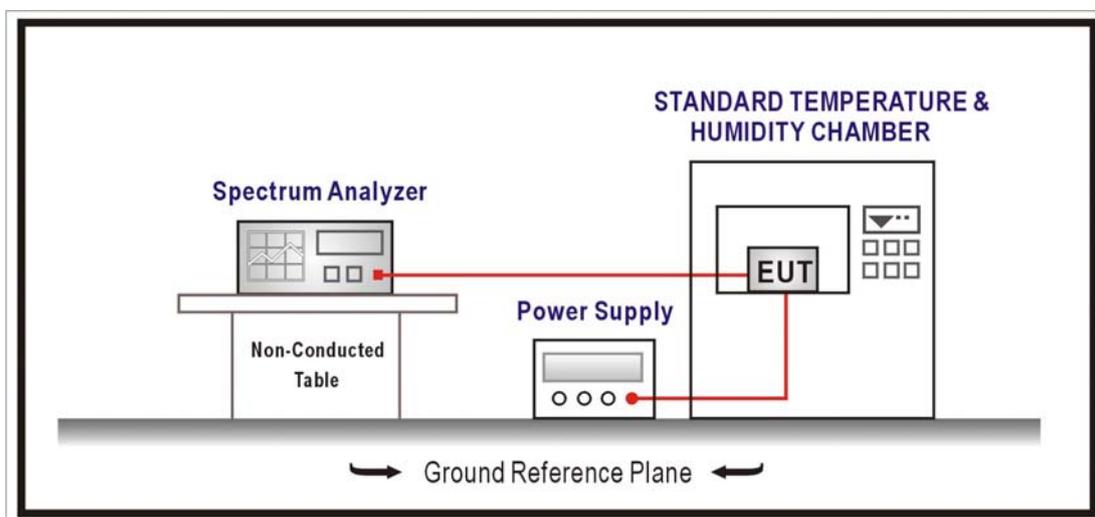
The following test equipments are used during the radiated emission tests:

Frequency Stability / SR7

Instrument	Manufacturer	Model No.	Serial No	Next Cal. Date
Spectrum Analyzer	Agilent	N9010A-EXA	US47140172	2016/08/23
Temperature & Humidity Chamber	WIT	TH-1S-B	1082101	2017/01/18

Note: All equipments that need to calibrate are with calibration period of 1 year.

3.2. Test Setup



3.3. Limits

Manufactures of all 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

3.4. Test Procedure

The EUT was setup to ANSI C63.10:2009; tested to U-NII test procedure of KDB 789033 D02 for compliance to FCC 47CFR Subpart E requirements.

3.5. Uncertainty

The measurement uncertainty is defined as ± 150 Hz

3.6. Test Result

Product	Dual-band Wireless-AC600 USB Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit - 802.11a - 5745MHz(ANT 0)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5745.0240	4.1805	PASS
-10		5745.0001	0.0123	PASS
0		5744.9892	-1.8748	PASS
10		5744.9840	-2.7806	PASS
20		5744.9906	-1.6403	PASS
30		5744.9790	-3.6587	PASS
40		5744.9978	-0.3856	PASS
50		5744.9909	-1.5786	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5745.0026	0.4460	PASS
	120	5744.9971	-0.5122	PASS
	138	5745.0033	0.5690	PASS

Product	Dual-band Wireless-AC600 USB Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit - 802.11a - 5825MH(ANT 0)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5825.0126	2.1574	PASS
-10		5825.0087	1.4890	PASS
0		5824.9877	-2.1149	PASS
10		5824.9687	-5.3808	PASS
20		5824.9631	-6.3353	PASS
30		5824.9832	-2.8864	PASS
40		5824.9768	-3.9743	PASS
50		5824.9801	-3.4191	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5824.9998	-0.0271	PASS
	120	5825.0019	0.3249	PASS
	138	5825.0006	0.0993	PASS

Product	Dual-band Wireless-AC600 USB Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit - 802.11n_20M - 5745MHz(ANT 0)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5745.0011	0.1927	PASS
-10		5745.0075	1.3047	PASS
0		5744.9721	-4.8555	PASS
10		5744.9963	-0.6510	PASS
20		5744.9924	-1.3152	PASS
30		5744.9553	-7.7847	PASS
40		5744.9715	-4.9643	PASS
50		5744.9921	-1.3813	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5745.0083	1.4533	PASS
	120	5744.9892	-1.8862	PASS
	138	5745.0079	1.3772	PASS

Product	Dual-band Wireless-AC600 USB Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit - 802.11n_20M - 5825MHz(ANT 0)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5825.0213	3.6579	PASS
-10		5825.0105	1.7987	PASS
0		5824.9855	-2.4974	PASS
10		5824.9602	-6.8354	PASS
20		5824.9983	-0.2914	PASS
30		5824.9944	-0.9532	PASS
40		5824.9411	-10.1135	PASS
50		5824.9662	-5.8021	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5824.9943	-0.9814	PASS
	120	5824.9938	-1.0706	PASS
	138	5824.9975	-0.4282	PASS

Product	Dual-band Wireless-AC600 USB Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit - 802.11n_40M - 5755MHz(ANT 0)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5755.0142	2.4666	PASS
-10		5755.0130	2.2543	PASS
0		5754.9767	-4.0503	PASS
10		5754.9612	-6.7367	PASS
20		5754.9874	-2.1917	PASS
30		5754.9556	-7.7170	PASS
40		5754.9543	-7.9439	PASS
50		5754.9780	-3.8314	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5754.9967	-0.5804	PASS
	120	5754.9952	-0.8274	PASS
	138	5754.9936	-1.1044	PASS

Product	Dual-band Wireless-AC600 USB Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit - 802.11n_40M - 5795MHz(ANT 0)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5795.0143	2.4722	PASS
-10		5795.0192	3.3174	PASS
0		5794.9703	-5.1330	PASS
10		5794.9848	-2.6220	PASS
20		5794.9700	-5.1698	PASS
30		5794.9531	-8.0967	PASS
40		5794.9831	-2.9228	PASS
50		5794.9468	-9.1823	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5795.0002	0.0416	PASS
	120	5794.9969	-0.5361	PASS
	138	5794.9934	-1.1360	PASS

Product	Dual-band Wireless-AC600 USB Adapter		
Test Item	Frequency Stability		
Test Mode	Mode 1: Transmit - 802.11ac_80M-5775MHz(ANT 0)		
Date of Test	2016/03/29	Test Site	SR7

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
-20	120	5755.0015	0.2649	PASS
-10		5755.0071	1.2332	PASS
0		5754.9756	-4.2456	PASS
10		5754.9735	-4.6020	PASS
20		5754.9972	-0.4935	PASS
30		5754.9593	-7.0670	PASS
40		5754.9611	-6.7558	PASS
50		5754.9974	-0.4590	PASS

Temperature Interval (°C)	AC Voltage (V)	Frequency (MHz)	Deviation (ppm)	Result
25	102	5755.0004	0.0766	PASS
	120	5754.9935	-1.1242	PASS
	138	5755.0041	0.7207	PASS

Attachment 1

- **Original Report**