FCC Test Report

Product Name	VoIP Phone
Model No	UVP-Pro
FCC ID	SWX-UVPPRO

Applicant	Ubiquiti Networks, Inc.
Address	12F, No. 105, Song Ren Rd., Sin Yi District, Taipei 110, Taiwan

Date of Receipt	Sep. 05, 2014
Issued Date	Nov. 14, 2014
Report No.	1490232R-RFUSP47V00
Report Version	V1.0



The test results relate only to the samples tested.

The test results shown in the test report are traceable to the national/international standard through the calibration report of the equipment and evaluated measurement uncertainty herein.

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Test Report

Issued Date: Nov. 14, 2014 Report No.: 1490232R-RFUSP47V00

QuieTek

Product Name	VoIP Phone				
Applicant	Ubiquiti Networks, Inc.				
Address	2F, No. 105, Song Ren Rd., Sin Yi District, Taipei 110, Taiwan				
Manufacturer	Ubiquiti Networks, Inc.				
Model No.	UVP-Pro				
FCC ID.	SWX-UVPPRO				
EUT Rated Voltage	DC 48V (Power by POE)				
EUT Test Voltage	AC 120V/60Hz				
Trade Name	UBIQUITI				
Applicable Standard	FCC CFR Title 47 Part 15 Subpart E: 2014				
	ANSI C63.10: 2009				
	789033 D02 General UNII Test Procedures New Rules v01				
Test Result	Complied				

Documented By :

:

:

Rita Huang

(Senior Adm. Specialist / Rita Huang)

Tested By

Pan enjumin

(Engineer / Benjamin Pan)

Approved By

(Director / Vincent Lin)

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Attachment 2: EUT Detailed Photographs

1. GENERAL INFORMATION

1.1. EUT Description

Product Name	VoIP Phone			
Trade Name	UBIQUITI			
FCC ID.	SWX-UVPPRO			
Model No.	UVP-Pro			
Frequency Range	802.11a/n-20MHz: 5180-5320MHz, 5500-5700MHz, 5745-5825MHz			
	802.11n-40MHz: 5190-5310, 5510-5670MHz, 5755-5795MHz			
Number of Channels	802.11a/n-20MHz: 24; 802.11n-40MHz: 11			
Data Rate	802.11a: 6 - 54Mbps			
	802.11n: up to 150Mbps			
Channel Control	Auto			
Type of Modulation	802.11a/n:OFDM, BPSK, QPSK, 16QAM, 64QAM			
Antenna type	Chip Antenna			
Antenna Gain	Refer to the table "Antenna List"			
Power Adapter	MFR: Ubiquiti, M/N: GP-B480-050G			
	Input: 100-240V, 50/60Hz MAX 0.75A			
	Output: 48V==0.5A			

Antenna List

No.	Manufacturer	Antenna Type	Peak Gain
1	TDK	Chip Antenna	5.18dBi For 5.15~5.35GHz
			5.04dBi For 5.47~5.725GHz
			4.09dBi For 5.725~5.825GHz

Note: The antenna of EUT is conform to FCC 15.203

802.11a/n-20MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 36:	5180 MHz	Channel 40:	5200 MHz	Channel 44:	5220 MHz	Channel 48:	5240 MHz
Channel 52:	5260 MHz	Channel 56:	5280 MHz	Channel 60:	5300 MHz	Channel 64:	5320 MHz
Channel 100:	5500 MHz	Channel 104:	5520 MHz	Channel 108:	5540 MHz	Channel 112:	5560 MHz
Channel 116:	5580 MHz	Channel 120:	5600 MHz	Channel 124:	5620 MHz	Channel 128:	5640 MHz
Channel 132:	5660 MHz	Channel 136:	5680 MHz	Channel 140:	5700 MHz	Channel 149:	5745 MHz
Channel 153:	5765 MHz	Channel 157:	5785 MHz	Channel 161:	5805 MHz	Channel 165:	5825 MHz

802.11n-40MHz Center Working Frequency of Each Channel:

Channel	Frequency	Channel	Frequency	Channel	Frequency	Channel	Frequency
Channel 38:	5190 MHz	Channel 46:	5230 MHz	Channel 54:	5270 MHz	Channel 62:	5310 MHz
Channel 102:	5510 MHz	Channel 110:	5550 MHz	Channel 118:	5590 MHz	Channel 126:	5630 MHz
Channel 134:	5670 MHz	Channel 151:	5755 MHz	Channel 159:	5795 MHz		

- 1. This device is a VoIP Phone with a built-in 802.11a/n WLAN transceiver.
- 2. Regarding to the operation frequency, the lowest, middle and highest frequency are selected to perform the test.
- Lowest and highest data rates are tested in each mode. Only worst case is shown in the report. (802.11a is 6Mbps

 802.11n-20BW is 7.2Mbps and 802.11n-40BW is 15Mbps
- 4. These tests were conducted on a sample of the equipment for the purpose of demonstrating compliance with Part 15 Subpart E for Unlicensed National Information Infrastructure devices.

Test Mode	Mode 1: Transmit (802.11a-6Mbps)
	Mode 2: Transmit (802.11n-20BW 7.2Mbps)
	Mode 3: Transmit (802.11n-40BW 15Mbps)

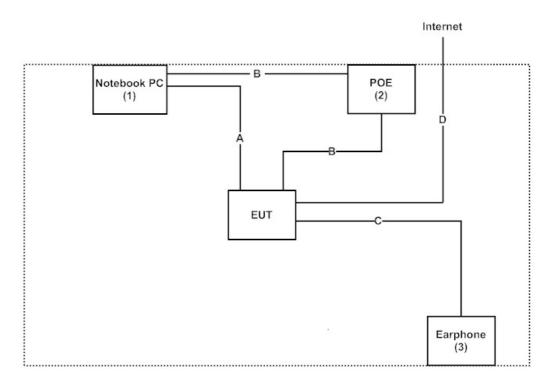
1.3. Tested System Datails

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

	Product	Manufacturer	Model No.	Serial No.	Power Cord
1	Notebook PC	DELL	PP18L	36119001664	Non-Shielded, 0.8m
2	POE	Ubiquiti	GP-B480-050	N/A	N/A
3	Earphone	Dr.AV	CD-806B	N/A	N/A

Signal Cable Type		Signal cable Description		
А	USB Cable	Shielded, 1.0m, with one ferrite core bonded.		
В	RJ45 Cable	Non-Shielded, 1.0m, two PCS.		
С	Earphone Cable	Non-Shielded, 1.0m		
D	RJ45 Cable	Non-Shielded, 2.0m		

1.4. Configuration of tested System



1.5. EUT Exercise Software

- (1) Setup the EUT as shown on 1.4
- (2) Execute "USI BCM FCC CE REG Tool V1.4.11" program on the EUT.
- (3) Configure the test mode, the test channel, and the data rate.
- (4) Start the continuous transmission.
- (5) Verify that the EUT works properly.

1.6. Test Facility

Items	Required (IEC 68-1)	Actual
Temperature (°C)	15-35	20-35
Humidity (%RH)	25-75	50-65
Barometric pressure (mbar)	860-1060	950-1000

The related certificate for our laboratories about the test site and management system can be downloaded from QuieTek Corporation's Web Site : <u>http://tw.quietek.com/modules/myalbum/</u>

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

Site Description:	File on
	Federal Communications Commission
	FCC Engineering Laboratory
	7435 Oakland Mills Road
	Columbia, MD 21046
	Registration Number: 92195

Site Name:	Quietek Corporation
Site Address:	No. 5-22, Ruei-Shu Valley, Ruei-Ping Tsuen,
	Lin-Kou Shiang, Taipei,
	Taiwan, R.O.C.
	TEL: 886-2-8601-3788 / FAX : 886-2-8601-3789
	E-Mail : <u>service@quietek.com</u>

FCC Accreditation Number: TW1014

2. Conducted Emission

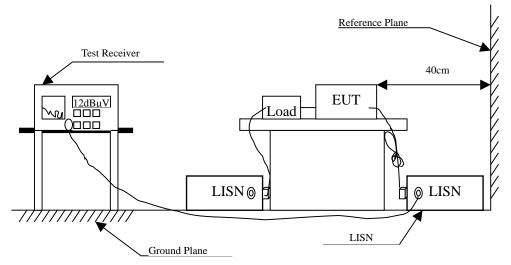
2.1. Test Equipment

	Equipment	Manufacturer	Model No. / Serial No.	Last Cal.	Remark
Х	Test Receiver	R & S	ESCS 30 / 825442/018	Sep., 2014	
Х	Artificial Mains Network	R & S	ENV4200 / 848411/10	Feb., 2014	Peripherals
Х	LISN	R & S	ESH3-Z5 / 825562/002	Feb., 2014	EUT
	DC LISN	Schwarzbeck	8226 / 176	Mar, 2014	EUT
X	Pulse Limiter	R & S	ESH3-Z2 / 357.8810.52	Feb., 2014	
	No.1 Shielded Room				

Note:

- 1. All equipments are calibrated every one year.
- 2. The test instruments marked by "X" are used to measure the final test results.

2.2. Test Setup



2.3. Limits

FCC Part 15 Subpart C Paragraph 15.207 (dBµV) Limit				
Frequency	Limits			
MHz	QP	AV		
0.15 - 0.50	66-56	56-46		
0.50-5.0	56	46		
5.0 - 30	60	50		

Remarks : In the above table, the tighter limit applies at the band edges.

2.4. Test Procedure

The EUT and simulators are connected to the main power through a line impedance stabilization network (L.I.S.N.). This provides a 50 ohm /50uH coupling impedance for the measuring equipment. The peripheral devices are also connected to the main power through a LISN that provides a 50ohm /50uH coupling impedance with 50ohm termination. (Please refers to the block diagram of the test setup and photographs.)

Both sides of A.C. line are checked for maximum conducted interference. In order to find the maximum emission, the relative positions of equipment and all of the interface cables must be changed according to ANSI C63.10:2009 on conducted measurement.

Conducted emissions were invested over the frequency range from 0.15MHz to 30MHz using a receiver bandwidth of 9kHz.

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

2.5. Uncertainty

± 2.26 dB

2.6. Test Result of Conducted Emission

Product	:	VoIP Phone
Test Item	:	Conducted Emission Test
Power Line	:	Line 1
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5190MHz)

Frequency	Frequency Correct Reading Me		Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV	dB	dBµV
LINE 1					
Quasi-Peak					
0.158	9.747	34.680	44.427	-21.344	65.771
0.170	9.743	32.900	42.644	-22.785	65.429
0.212	9.739	28.440	38.179	-26.050	64.229
0.341	9.745	26.150	35.895	-24.648	60.543
0.505	9.753	33.100	42.853	-13.147	56.000
0.654	9.759	26.900	36.659	-19.341	56.000
Average					
0.158	9.747	26.160	35.907	-19.864	55.771
0.170	9.743	13.810	23.554	-31.875	55.429
0.212	9.739	20.420	30.159	-24.070	54.229
0.341	9.745	10.480	20.225	-30.318	50.543
0.505	9.753	21.420	31.173	-14.827	46.000
0.654	9.759	19.760	29.519	-16.481	46.000

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor

Product	:	VoIP Phone
Test Item	:	Conducted Emission Test
Power Line	:	Line 2
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5190MHz)

Frequency	Frequency Correct Reading Measuremen		Measurement	Margin	Limit
	Factor Level Level		Level		
MHz	dB	dBµV	dBµV	dB	dBµV
LINE 2					
Quasi-Peak					
0.166	9.747	33.830	43.577	-21.966	65.543
0.212	9.749	28.580	38.329	-25.900	64.229
0.373	9.747	28.450	38.197	-21.432	59.629
0.498	9.752	32.750	42.502	-13.555	56.057
7.912	9.920	27.580	37.500	-22.500	60.000
21.162	10.105	25.840	35.945	-24.055	60.000
Average					
0.166	9.747	28.500	38.247	-17.296	55.543
0.212	9.749	24.300	34.049	-20.180	54.229
0.373	9.747	15.410	25.157	-24.472	49.629
0.498	9.752	28.740	38.492	-7.565	46.057
7.912	9.920	22.630	32.550	-17.450	50.000
21.162	10.105	20.160	30.265	-19.735	50.000

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor

Product	:	VoIP Phone
Test Item	:	Conducted Emission Test
Power Line	:	Line 1
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5270MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV	dB	dBµV
LINE 1					
Quasi-Peak					
0.170	9.743	31.770	41.514	-23.915	65.429
0.216	9.739	29.070	38.809	-25.305	64.114
0.377	9.747	28.700	38.447	-21.067	59.514
0.525	9.753	32.540	42.293	-13.707	56.000
1.263	9.795	25.850	35.645	-20.355	56.000
21.170	10.065	26.590	36.655	-23.345	60.000
Average					
0.170	9.743	19.210	28.954	-26.475	55.429
0.216	9.739	21.590	31.329	-22.785	54.114
0.377	9.747	24.340	34.087	-15.427	49.514
0.525	9.753	24.320	34.073	-11.927	46.000
1.263	9.795	17.130	26.925	-19.075	46.000
21.170	10.065	19.700	29.765	-20.235	50.000

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor

Product	:	VoIP Phone
Test Item	:	Conducted Emission Test
Power Line	:	Line 2
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5270MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV	dB	dBµV
LINE 2					
Quasi-Peak					
0.162	9.747	34.780	44.527	-21.130	65.657
0.314	9.744	26.650	36.394	-24.920	61.314
0.377	9.747	28.840	38.587	-20.927	59.514
0.529	9.754	32.420	42.174	-13.826	56.000
7.931	9.920	27.330	37.250	-22.750	60.000
21.205	10.105	25.610	35.715	-24.285	60.000
Average					
0.162	9.747	20.840	30.587	-25.070	55.657
0.314	9.744	20.460	30.204	-21.110	51.314
0.377	9.747	18.490	28.237	-21.277	49.514
0.529	9.754	24.910	34.664	-11.336	46.000
7.931	9.920	21.940	31.860	-18.140	50.000
21.205	10.105	20.650	30.755	-19.245	50.000

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor

Product	:	VoIP Phone
Test Item	:	Conducted Emission Test
Power Line	:	Line 1
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5510MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV	dB	dBµV
LINE 1					
Quasi-Peak					
0.154	9.749	33.630	43.378	-22.508	65.886
0.205	9.739	27.460	37.199	-27.230	64.429
0.267	9.742	25.920	35.662	-26.995	62.657
0.490	9.752	32.790	42.542	-13.744	56.286
8.056	9.910	27.490	37.400	-22.600	60.000
21.369	10.068	27.010	37.078	-22.922	60.000
Average					
0.154	9.749	19.990	29.738	-26.148	55.886
0.205	9.739	15.970	25.709	-28.720	54.429
0.267	9.742	20.280	30.022	-22.635	52.657
0.490	9.752	27.340	37.092	-9.194	46.286
8.056	9.910	22.110	32.020	-17.980	50.000
21.369	10.068	20.660	30.728	-19.272	50.000

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor

Product	:	VoIP Phone
Test Item	:	Conducted Emission Test
Power Line	:	Line 2
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5510MHz)

ctor	T areal			
	Level	Level		
lB	dBµV	dBμV	dB	dBµV
750	28.520	38.270	-25.730	64.000
752	25.860	35.612	-27.045	62.657
753	33.100	42.853	-13.147	56.000
798	26.680	36.478	-19.522	56.000
920	27.580	37.500	-22.500	60.000
.101	26.380	36.481	-23.519	60.000
750	20.710	30.460	-23.540	54.000
752	18.890	28.642	-24.015	52.657
753	21.730	31.483	-14.517	46.000
798	17.030	26.828	-19.172	46.000
920	22.510	32.430	-17.570	50.000
.101	23.120	33.221	-16.779	50.000
	750 : 752 : 753 : 798 : 920 : 101 : 750 : 752 : 753 : 798 : 920 :	750 28.520 752 25.860 753 33.100 798 26.680 920 27.580 .101 26.380 750 20.710 752 18.890 753 21.730 798 17.030 920 22.510	750 28.520 38.270 752 25.860 35.612 753 33.100 42.853 798 26.680 36.478 920 27.580 37.500 $.101$ 26.380 36.481 750 20.710 30.460 752 18.890 28.642 753 21.730 31.483 798 17.030 26.828 920 22.510 32.430	750 28.520 38.270 -25.730 752 25.860 35.612 -27.045 753 33.100 42.853 -13.147 798 26.680 36.478 -19.522 920 27.580 37.500 -22.500 $.101$ 26.380 36.481 -23.519 750 20.710 30.460 -23.540 752 18.890 28.642 -24.015 753 21.730 31.483 -14.517 798 17.030 26.828 -19.172 920 22.510 32.430 -17.570

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor

Product	:	VoIP Phone
Test Item	:	Conducted Emission Test
Power Line	:	Line 1
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5755MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV	dB	dBµV
LINE 1					
Quasi-Peak					
0.154	9.660	30.970	40.630	-25.256	65.886
0.361	9.659	36.650	46.309	-13.662	59.971
0.392	9.661	35.090	44.751	-14.335	59.086
0.630	9.674	26.280	35.954	-20.046	56.000
1.423	9.727	23.570	33.297	-22.703	56.000
10.822	9.998	32.990	42.988	-17.012	60.000
Average					
0.154	9.660	14.330	23.990	-31.896	55.886
0.361	9.659	29.050	38.709	-11.262	49.971
0.392	9.661	32.180	41.841	-7.245	49.086
0.630	9.674	15.780	25.454	-20.546	46.000
1.423	9.727	19.470	29.197	-16.803	46.000
10.822	9.998	27.190	37.188	-12.812	50.000

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor

Product	:	VoIP Phone
Test Item	:	Conducted Emission Test
Power Line	:	Line 2
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5755MHz)

	Reading M	easurement	Margin	Limit
Factor	Level	Level		
dB	dBµV	dBµV	dB	dBµV
9.660	27.970	37.630	-27.027	64.657
9.659	35.720	45.379	-14.592	59.971
9.691	20.460	30.151	-25.849	56.000
9.711	21.230	30.941	-25.059	56.000
9.951	27.230	37.181	-22.819	60.000
9.998	29.160	39.158	-20.842	60.000
9.660	17.300	26.960	-27.697	54.657
9.659	30.700	40.359	-9.612	49.971
9.691	10.900	20.591	-25.409	46.000
9.711	14.850	24.561	-21.439	46.000
9.951	18.860	28.811	-21.189	50.000
9.998	21.170	31.168	-18.832	50.000
	dB 0.660 0.659 0.691 0.711 0.951 0.998 0.660 0.659 0.691 0.711 0.951	dB dBµV 0.660 27.970 0.659 35.720 0.691 20.460 0.711 21.230 0.951 27.230 0.998 29.160 0.660 17.300 0.659 30.700 0.691 10.900 0.711 14.850 0.951 18.860	dB $dB\mu V$ $dB\mu V$ 0.66027.97037.6300.65935.72045.3790.69120.46030.1510.71121.23030.9410.95127.23037.1810.99829.16039.1580.66017.30026.9600.65930.70040.3590.69110.90020.5910.71114.85024.5610.95118.86028.811	dB $dB\mu V$ $dB\mu V$ dB 0.66027.97037.630 -27.027 0.65935.72045.379 -14.592 0.69120.46030.151 -25.849 0.71121.23030.941 -25.059 0.95127.23037.181 -22.819 0.99829.16039.158 -20.842 0.66017.30026.960 -27.697 0.65930.70040.359 -9.612 0.69110.90020.591 -25.409 0.71114.85024.561 -21.439 0.95118.86028.811 -21.189

- 1. All Reading Levels are Quasi-Peak and average value.
- 2. "means the worst emission level.
- 3. Measurement Level = Reading Level + Correct Factor

3. Maximun conducted output power

3.1. Test Equipment

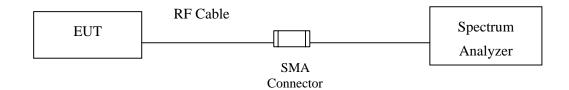
	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
Х	Power Meter	Anritsu	ML2495A/6K00003357	May, 2014
Х	Power Sensor	Anritsu	MA2411B/0738448	Jun., 2014
Х	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014
Note	e:			

1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

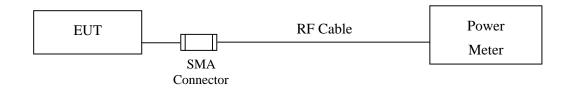
2. The test instruments marked with "X" are used to measure the final test results.

3.2. Test Setup

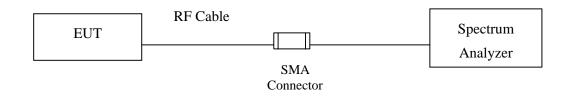
26dBc Occupied Bandwidth



Conduction Power Measurement (for 802.11an)



Conduction Power Measurement (for 802.11ac)



3.3. Limits

3.3.1. For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. provided the maximum antenna gain does not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. The maximum e.i.r.p. at any elevation angle above 30 degrees as measured from the horizon must not exceed 125 mW (21 dBm).

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W provided the maximum antenna gain does not exceed 6 dBi. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-topoint U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

(iv) For mobile and portable client devices in the 5.15-5.25 GHz band, the maximum conducted output power over the frequency band of operation shall not exceed 250 mW provided the maximum antenna gain does not exceed 6 dBi. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

- 3.3.2. For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, the maximum conducted output power over the frequency bands of operation shall not exceed the lesser of 250 mW or 11 dBm 10 log B, where B is the 26 dB emission bandwidth in megahertz. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.
- 3.3.3. For the band 5.725-5.85 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. In addition. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum conducted output power shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any

corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

3.4. Test Procedur

As an alternative to FCC KDB-789033, the EUT maximum conducted output power was measured with an average power meter employing a video bandwidth greater than 6dB BW of the emission under test. Maximum conducted output power was read directly from the meter across all data rates, and across three channels within each sub-band. Special care was used to make sure that the EUT was transmitting in continuous mode. This method exceeds the limitations of FCC KDB-789033, and provides more accurate measurements.

802.11an (BW \leq 40MHz) Maximum conducted output power using KDB 789033 section E)3)b) Method PM-G (Measurement using a gated RF average power meter) <u>Note: the power meter have a video bandwidth that is greater than or equal to the measurement</u> <u>bandwidth, (Anritsu/MA2411B video bandwidth: 65MHz)</u>

802.11ac (BW=80MHz) Maximum conducted output power using KDB 789033 section E)2)b) Method SA-1 (trace averaging with the EUT transmitting at full power throughout each sweep).

When transmitted signals consist of two or more non-contiguous spectrum segments (e.g., 80+80 MHz mode) or when a single spectrum segment of a transmission crosses the boundary between two adjacent U-NII bands, KDB 644545 D01 section F) procedure is used for measurements.

3.5. Uncertainty

± 1.27 dB

3.6. Test Result of Maximum conducted output power

Product	:	VoIP Phone
Test Item	:	Maximum conducted output power
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)

Cable	e loss=1dB				Maximu	ım cond	lucted o	utput po	ower	
Channel No.	Frequency (MHz)	6	9	12	18	24	36	48	54	Required Limit
				Measu	urement	Level (dBm)			
36	5180	14.11								<24dBm
44	5220	14.14	14.06	13.99	13.92	13.83	13.74	13.65	13.58	<24dBm
48	5240	14.18								<24dBm
52	5260	14.26								<24dBm
60	5300	14.07	14.03	13.98	13.95	13.89	13.84	13.78	13.75	<24dBm
64	5320	14.25								<24dBm
100	5500	14.17								<24dBm
116	5580	14.12	14.08	14.05	14.01	13.99	13.92	13.87	13.81	<24dBm
140	5700	14.33								<24dBm
149	5745	14.38								<30dBm
157	5785	14.09	14.05	14.01	13.96	13.92	13.82	13.79	13.75	<30dBm
165	5825	14.03								<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Channel No	Frequency Range	26dB Bandwidth	Output Power	Output Po	ower Limit
	(MHz)	(MHz)	(dBm)	(dBm)	dBm+10log(BW)
36	5180		14.11	24	
44	5220		14.14	24	
48	5240		14.18	24	
52	5260	39.60	14.26	24	26.98
60	5300	39.50	14.07	24	26.97
64	5320	35.10	14.25	24	26.45
100	5500	39.40	14.17	24	26.95
116	5580	43.70	14.12	24	27.40
140	5700	45.30	14.33	24	27.56
149	5745		14.38	30	
157	5785		14.09	30	
165	5825		14.03	30	

Maximum conducted output power Measurement:

Note: Power Output Value =Reading value on average power meter + cable loss



26dBc Occupied Bandwidth: Channel 52:

igilent Spectrum Analyzer - S					
	IQ AC	SENSE:INT	ALIGNAUTO	10:20:57 PM Oct 28, 2014	Frequency
Center Freq 5.2600	DOOOOOO GHz PNO: Fast G IFGain:Low	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	Frequency
10 dB/div Ref 20.00	t al tal		Mk	r2 5.241 0 GHz -21.62 dBm	Auto Tun
-og 10.0					Center Fre
0.00			2	1	5.260000000 GH
20.0	2 white		Thelenhordente	-20.40 dBm	Start Fre
30.0 40.0	- enterplayhant		A malana	Automation	5.210000000 GH
55.5				and the stands the forest and the second of	Stop Fre
70.0				1	5.310000000 GH
enter 5.26000 GHz Res BW 360 kHz	#VBV	V 1.0 MHz		Span 100.0 MHz 1.00 ms (1001 pts)	CF Ste 10.000000 MH Auto Mi
1 N 1 F	× 5.258 5 GHz	6.34 dBm	JNCTION FUNCTION WIDTH	FUNCTION VALUE	Auto Mi
2 N 1 f 3 N 1 f 4 5	5.241 0 GHz 5.280 6 GHz	-21.62 dBm -20.66 dBm			Freq Offs 0 F
6					
8 9 10					
10					
G			STATUS		

Channel 60:

				Chan						
							lyzer - Swe	um Ana	t Spect	gilen
Examples	10:32:29 PM Oct 28, 2014	ALIGNAUTO	1	SENSE:INT		AC		RF		a R
Frequency	TRACE 123456 TYPE MWWWWWW DET PNNNNN	e: Log-Pwr	Avg Ty	Frig: Free Run Atten: 30 dB	Hz PNO: Fast 😱 Gain:Low		6.30000	req 5	ter F	Cen
Auto Tur	2 5.281 4 GHz	Mki		Allen. 30 dB	Gain:Low			-	-	
	-21.07 dBm					Bm	20.00 c	Ref	3/div	l0 di
Center Fre				\Diamond^1		1.00			71.2	10.0
5.30000000 GH		-		al martin in the marting				_		0.00
	-20.38 dBm	∆3	"mine place		Anna and					10.0
Start Fre		Way	- CACH		Writer	d			1	20.0
5.250000000 GH	how and the property and the second	harden				have/up.M	W- washally	INK		40.0
	1 PARKAMANULAN							W/W WWW	Aurorat	50.0
Stop Fre 5.35000000 GH										60.0
3.350000000 GF	e								1.	70.0
CF Ste 10.000000 MH	Span 100.0 MHz 00 ms (1001 pts)	Sweep 1		.0 MHz	#VBW		0 GHz kHz		ter 5. s BW	
<u>Auto</u> Ma	FUNCTION VALUE	NCTION WIDTH	CTION F		-	×			MODE T	
				6.68 dBm 21.07 dBm	4 GHz 4 GHz		-	f	N	1
Freq Offs				22.56 dBm	9 GHz	5.320		f	N 1	3
01										5
										7
									-	8
									-	10 11
									-	12
		STATUS								ISG

		04.	Channe						
	10:35:22 PM Oct 28, 2014	ALIGNAUTO	SENSE:INT			l <mark>lyzer - Sw</mark> e 50 Ω	m Ana RF	Spectru	ilent RL
Frequency	TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	Avg Type: Log-Pwr	rig: Free Run	Z	0000 GH			er Fre	
Auto Tun		MIL	Atten: 30 dB	ain:Low		_	-		-
	2 5.303 80 GHz -20.75 dBm	IVIKT2		1	Bm	20.00 d	Ref	div	dB.
Center Free			-	1					0.0
5.320000000 GH		int	duman Marian	Julian					.00 -
1	-19.99 dBm	and a start of the second		Butt	a application and	¢ ²			0.0 0.0 -
Start Fre 5.29500000 GH	and and the state of the second		-			NI THEY AND	ready	Joseph	0.0
5.295000000 GH								Wer	0.0
Stop Fre									0.0 0.0
5.345000000 GH								_	0.0 -
CF Ste	Span 50.00 MHz .00 ms (1001 pts)	Sween 1	0 MHz	#VBW		0 GHz		er 5.3. BW 3	
5.000000 MH <u>Auto</u> Ma		and the second sec	Y FUNI		×		0000	IDE TRO	200
			5.49 dBm 20.75 dBm		5.313 55 5.303 80	-	f		1 1
Freq Offse			20.50 dBm) GHz	5.338 90		f	1 1	3 I 4
0 H									5 6 7
									8
									9
								-	1

Channel 64:

Channel 100:

K RL				AC		SENS	E:INT		ALIGNAUTO		4 Oct 28, 2014	Engenting
Cent	er	Fred	5.50000	F	NO: Fast G	Trig: Free I		Avg Typ	e: Log-Pwr	TRACI TYP DE	123456 EM WWWW TPNNNNN	Frequency
10 10			AF 20.00		Gain:Low	#Atten: 30	aB.		Mk	r2 5.479	10 C C C C C	Auto Tun
10 dB/	div	N	ef 20.00	авт	1	1	A.	1	1	-22.0	o ubiii	
10.0	-	-				Con the second of	\sim		-	_		Center Fre
0,00	-			-			1 1 1 1 1		-		-	5.50000000 GH
10.0		-		-	2	N. Contraction		had a s	3			
20.0 -	-	_			2 some rook			Sid Hornes			-19.45 dBm	
30.0	-		-	- AV		-			mu	-		Start Fre
-40.0	-		and the served	Wondlider					MAR ANN	htmail-log abovited		5.450000000 GH
50.0	-ann	Mardrull									a stand company	
60.0		_										Stop Fre
-70.0 -	-				-					1		5.550000000 GH
			000 GHz 0 kHz		#VB\	V 1.0 MHz			Sweep	Span 1 1.00 ms (′		CF Ste 10.000000 MH
MKR MO				х		Y		CTION FL	NCTION WIDTH	FUNCTION	VALUE	<u>Auto</u> Ma
	N		f f		4 GHz 8 GHz	7.70 dBr -22.86 dBr						
3 M	N	1	f	5.519	2 GHz	-21.20 dBr	n					Freq Offs
5			1									0 H
6	-		-									
8												
9 10	_	-										
11												

gilent Spectrum Analyzer					
	50 Ω AC	SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	10:55:11 PM Oct 28, 2014	Frequency
Center Freq 5.58	PNO: Fast GRAD	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	
0 dB/div Ref 20.	00 dBm	10 A 44	M	r2 5.558 3 GHz -19.32 dBm	Auto Tur
og			1		
10.0		mangement			Center Fre
0,00					5.58000000 GH
10.0		<u> </u>	Skill A 3		
20.0	- Anthorna and		3 3 and the second	-17.72 dBm	
	hiller		Achilyphan	12	Start Fre
30.0 40.0	And Wards		andres	What have many miles and	5.530000000 GH
40.0 Jan and market and and				What was a full and a summer	A CONTRACT OF A CONTRACT.
50.0				· · · · · · · · · · · · · · · · · · ·	
60.0					Stop Fre
				1	5.630000000 GH
70.0					
Center 5.58000 GH	47		4 4	Span 100.0 MHz	11
Res BW 430 kHz		1.0 MHz	Sweep	1.00 ms (1001 pts)	CF Ste 10.000000 MH
KR MODE TRC SCL	X	Y Í FU	NCTION FUNCTION WIDTH		Auto Ma
1 N 1 f	5.587 7 GHz	9.62 dBm	ACTION FONCTION WIDTH	FUNCTION VALUE	
2 N 1 f	5.558 3 GHz	-19.32 dBm			TT LOT AND
3 N 1 f	5.602 0 GHz	-19.86 dBm			Freq Offs
5					01
6					
8					
9					
10					
11					
		0			
SG			STATU		

Channel 116:

Channel 140:

Energyments	11:03:39 PM Oct 28, 2014	ALIGN AUTO		INSE:INT	SEN			50 Ω	RF	11		a R
Frequency	TRACE 1 2 3 4 5 6	: Log-Pwr	Avg Typ		Trig: Free		0000 G	.70000	eq 5.	Fre	nter	Cen
a. (A.) in .	TYPE MWWWWW DET P N N N N N				#Atten: 30	PNO: Fast G FGain:Low						
Auto Tui	2 5.677 5 GHz -18.13 dBm	Mkr				15	IBm	20.00 c	Ref	v	B/div	
Center Fre				\bigcirc 1	(Salaman and a salar	1	1				0	.og
5.700000000 GI				dreissand	Farmery							0.00
	-17.60 dBm	3	"Handhadanasher		off.	2				_		10.0
Start Fre		and the work of the second		-			a contraction of the		-		1	20.0
5.65000000 GI	and an and the man and a series		-	12				Worther	Victor 1	phyliphy	in the	30.0
				-	-				-			50.0
Stop Fre 5,75000000 GI					-	-						60.0
	e all'artic						1				$[0,\tilde{1}]_{i}$	70.0
CF Ste 10.000000 MI	Span 100.0 MHz 00 ms (1001 pts)	Sweep 1		2	V 1.0 MHz	#VB		GHz Hz	0000 30 k			
uto Mi	FUNCTION VALUE	CTION WIDTH	CTION		Y		×				MODE	
					9.91 dE -18.13 dB	5 1 GHz	5.706		f	1	N	1
Freq Offs					-19.83 dB	28 GHz			f	1	N	3
01												5
			1			1					-	6
												8
											-	9
				+						+		
												11

Product	:	VoIP Phone
Test Item	:	Maximum conducted output power
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)

Cable	Cable loss=1dB			Maximum conducted output power								
			r	r								
Channel No.	Frequency (MHz)	7.2	14.4	21.7	28.9	43.3	57.8	65	72.2	Required Limit		
				Measu	irement	Level (dBm)					
36	5180	13.17								<24dBm		
44	5220	13.04	13.01	12.96	12.92	12.87	12.82	12.76	12.67	<24dBm		
48	5240	13.47								<24dBm		
52	5260	13.04								<24dBm		
60	5300	13.05	13.02	12.99	12.96	12.93	12.89	12.86	12.78	<24dBm		
64	5320	13.11								<24dBm		
100	5500	13.33								<24dBm		
116	5580	13.13	13.08	13.03	12.98	12.93	12.88	12.85	12.81	<24dBm		
140	5700	13.04								<24dBm		
149	5745	13.46								<30dBm		
157	5785	13.16	13.12	13.09	13.03	12.99	12.96	12.89	12.85	<30dBm		
165	5825	13.15								<30dBm		

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss



Channel No	Frequency Range	26dB Bandwidth	Output Power	Output Power Limit			
	(MHz)	(MHz)	(dBm)	(dBm)	dBm+10log(BW)		
36	5180		13.17	24			
44	5220		13.04	24			
48	5240		13.47	24			
52	5260	31.80	13.04	24	26.02		
60	5300	31.75	13.05	24	26.02		
64	5320	32.20	13.11	24	26.08		
100	5500	37.60	13.33	24	26.75		
116	5580	41.70	13.13	24	27.20		
140	5700	47.40	13.04	24	27.76		
149	5745		13.46	30			
157	5785		13.16	30			
165	5825		13.15	30			

Maximum conducted output power Measurement:

Note: Power Output Value =Reading value on average power meter + cable loss



26dBc Occupied Bandwidth:
Channel 52

				Chamie					
						zer - Swept S	trum Analy	ut Spec	Agiler
Frequency	1:19:17 PM Oct 28, 2014	ALIGNAUTO		SENSE:INT		50 Q A	RF		KI R
Frequency	TRACE 1 2 3 4 5 6 TYPE MWWWWWW	pe: Log-Pwr	Avg Ty			2600000	req 5.	nter	Cer
20.20	DET P N N N N N			¹ Trig: Free Run #Atten: 30 dB	PNO: Fast C IFGain:Low		100		
	5.242 8 GHz -23.85 dBm	Mki			r	20.00 dBr	Ref 2	B/div	
					1.1				Log
Center Fre				1				-	10.0
5.26000000 GH	-		44	mounder				-	0,00
A second second			1	(4.6.	-10.0
	-22.01 dBm		1.03		▲2			11-1	181
Start Fre	~22.01 dBm	hau 1	- Martin W		in the allowed		-	-	-20.0
5.210000000 GH		TIMA	-		Ja Way M		-	-	-30.0
5.2 1000000 Gr		"h			UNU			1	-40.0
	www.houtrownwell	the survey	1.1	· _ : :	C 1	AN MUSICAN	-me - alar	the par	-50.0
Ctop Er									
Stop Fre							-	-	-60.0
5.310000000 GH								-	-70.0
CF Ste	pan 100.0 MHz 7 ms (1001 pts)	Sweep 1		1.0 MHz	#VB		.26000 / 300 ki		
Auto Mi		UNCTION WIDTH	INCTION		00000000		TRC SCL	MODE	MKR
				4.00 dBm	5.254 9 GHz		1 f	N	1
Fran Offa			- 1	-23.85 dBm -22.66 dBm	5.242 8 GHz 5.274 6 GHz		1 f	N N	2
Freq Offs				-22.00 0.511	0.274 0 GHZ		-	18	4
01									5
			-					_	6
									8
									9
								-	10
									11
								-	
		STATUS							
									_

Channel 60

-	PM Oct 28, 2014	11:28:02	ALIGN AUTO		SENSE:INT			AC	50 Ω	RF		RL
Frequency	CE 1 2 3 4 5 6 PE MWWWWW DET P NNNNN	TRA	: Log-Pwr	Avg Typ	ree Run	Tria: F	Hz PNO: Fast	0000 G	.30000	eq 5	er Fre	nt
A	the second of the	10 C	- 5.00		:30 dB		FGain:Low		_			
	75 GHz 74 dBm		Mkr					Bm	20.00 d	Ref	div	dB.
Center Er	100 100				12		5	1.00				g .0
		1		- marine		w www.	for					20
		•	0	-	-	-	at	2			-	.0
Start Fr	-21.82 dBm	A3	a sumbered		-		skiller.	PAR AND AND	- Manual Barrow	-	_	.0
5.275000000 G	Alkand Branny								the states of	dage Ally	an all and the second	.0
Stop Fr				1							-	.0 -
5.325000000 G	1	1	i i									.0 - .0 -
CF St 5.000000 M	50.00 MHz (1001 pts)		Sweep		Ηz	W 1.0 MI	#VB) GHz (Hz		er 5.3 BW 3	
uto M	ON VALUE	FUNCTIO	CTION WIDTH	NCTION FL		Y		×			DE TRO	
K. M.F.			-			-23.74	95 GHz 75 GHz	5.284 7		f	V 1 V 1	1
Freq Offs		-			dBm	-25.37	50 GHz	5.316 5		f	1 1	
0		_									-	
			_	4 10							-	()
											-	

			04	Channel						
						vept SA	lyzer - Swe	rum Ana		
Frequency	11:33:06 PM Oct 28, 2014 TRACE 1 2 3 4 5 6	ALIGN AUTO	Avg Type	SENSE(INT		2 AC		RF		R
	TYPE MWWWWW DET P N N N N N	: Log-Pwr	Avg Type	Trig: Free Run #Atten: 30 dB	GHZ PNO: Fast 😱 IFGain:Low	00000 GI F	.32000	req 5	iter H	Cer
Hz Auto Tun 3m Center Fre 5.320000000 GH	5.303 70 GHz -25.77 dBm	Mkr2			12	dBm	20.00 d	Ref	B/div	10 d
				· · · · · ·	1		1.11			Log 10.0
			money	m	pornaute		12.11		010	0.00
0.020000000 011		0	- A		N					-10.0
Start Free	3 22.14 dBm	Mundamine Comme	_		Jed	2			_	-20.0
5.295000000 GH:	her was was walked to the hours						U. P. Meters	hand the	An Ard	-30.0
			-							-40.0
Stop Free							11		1	-50.0
5.345000000 GH										-70.0
CF Ster 5.000000 MH	Span 50.00 MHz 00 ms (1001 pts)	Sweep 1.		1.0 MHz	#VBW		0 GHz kHz	32000 300 H		
<u>Auto</u> Mar	FUNCTION VALUE	CTION WIDTH	ICTION FUN			X		RC SCL		
				4.47 dBm -25.77 dBm	7 75 GHz 3 70 GHz			f	N	1
Freq Offse				-24.58 dBm	5 90 GHz			f	N	3
0 H		1.1								5
									1	6 7 8 9
					111		1			8
		-								10
									-	11 12
		STATUS								MSG

Channel 64

Channel 100

5 6 Frequency	11:38:29 PM Oct 28, 2014	ALIGNAUTO		SENSE:INT			50 Ω	RF	Ľ,
Frequency	TRACE 123456 TYPE MWWWWWW DET P N N N N N	ype: Log-Pwr	Avg	Trig: Free Run	NO: Fast 💭	0000 GH	50000	Freq :	ter
Auto Tune	r2 5.482 9 GHz -21.96 dBm	Mk		#Atten: 30 dB	Gain:Low		20.00 d	Ref	3/div
Center Fre 5.500000000 GH				Aller and the second			20.00 0		
Start Fre 5.45000000 GH	-20.53 dBm	Min Min	Mary		2 And	in all of the search	Northwork ward	antraphicants	adma
Stop Fre 5.55000000 GH									
CF Ste 10.000000 MH Auto Ma	Span 100.0 MHz 1.00 ms (1001 pts)	Sweep	FUNCTION	1.0 MHz	#VBW	×		0.5000 V 360	s BV
Freq Offse 0 H				6.45 dBm -21.96 dBm -22.15 dBm	7 GHz 9 GHz 5 GHz	5.506 5.482		1 f 1 f 1 f	N N N

						Ulla	nnei	110							
	pectru		yzer - Swe												
RL	-	RF	50 2	AC		SEN	SE:INT	Aug Tup	ALIGNAUTO E: Log-Pwr		Oct 28, 2014	Frequency			
sente	r Fr	eq 5.	.58000		PNO: Fast C FGain:Low	Trig: Free #Atten: 30		ANA IND.	e. Log-r wi	TY	PE MWWWWWW ET P N N N N N	Auto Tun			
10 dB/d	liv	Ref	20.00 d	Bm	25		Mkr2 5.560 2 GHz -20.41 dBm								
og				10.000	E	1	100 B				100.000	1			
10.0				· · · · · ·		monterner	American					Center Fre			
0,00	-				-	1	-	1				5.58000000 GH			
10.0	_	-			2	P	-	Man	\wedge^3						
20.0 -	_	_	-	N	win-han	<u>r</u>	-	manul	Δ^{-}		-19.46 dBm	Start Fre			
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40.0	Arran	Aller	Angunal has been	hanna	-				nurst-	Umaldian	him	5.530000000 GF			
50.0	-Herton						1	1			a participation and				
60.0												Stop Fre			
10.1				1	1		1	1		1		5.630000000 GH			
70.0				1	2		Sec		· · · · · · · ·			i de la come e come			
Center	r 5.5	8000	GHz			0.000				Span 1	00.0 MHz	05.044			
Res	BW :	390 k	Hz		#VB	W 1.0 MHz			Sweep	1.00 ms ((1001 pts)	CF Ste 10.000000 MH			
MKR MOD	DEL TR	C SCL		×		Y	FUN	ICTION FUI	ICTION WIDTH	FUNCTIO	IN VALUE	Auto Ma			
1 N		f			67 GHz	7.06 dE									
2 N 3 N		f			0 2 GHz 1 9 GHz	-20.41 dB -21.84 dB						Freq Offs			
4				0.00		21.04 40						OF			
5	-						-					UF			
7	1														
8	-				1411		-			2					
10									-						
11 12	-						_								
12	-	1					-								
ISG									STATUS						

Channel 116

Channel 140

Frequency	12:08:00 AM Oct 29, 2014	ALIGN AUTO		SENSE:INT				50 Ω	RF			Rl
Frequency	TRACE 1 2 3 4 5 6 TYPE MWWWWW	e: Log-Pwr	Avg Ty	ree Run	Trig: F	Hz NO: Fast G	0000 GH	70000	eq 5.	Fre	ter	en
Auto Tun	DET P NNNNN			: 30 dB	#Atter	Gain:Low					_	
Center Freq	r2 5.677 3 GHz -19.94 dBm	Mk		1.0		22	Bm	20.00 d	Ref	-	3/div	0 dE
Center Fre				Q.	(Thinks	200					71	og 10.0
5.700000000 GH				and and the second	1			-		-	-	0,00
	-19.70 dBm	Mm 13	MANNA M			Warthoundurnal				-		10.0
Start Fre				44	_		MANNA					20.0
5.650000000 GH	withing the week of the second s					-		narrana	alempter	awyih	a series	40.0
Stop Fre											17	50.0
5.750000000 GH	1 — I · · · · ·		_				1					50.0 70.0
CF Ste	Span 100.0 MHz 1.00 ms (1001 pts)	Sween		17	V 1.0 M	#VB)		GHz Hz)000 30 k			
10.000000 MH Auto Ma	Con a construction of the second		CTION F		Y No The The		X			13.5	MODE	
				dBm	7.82	1 GHz 3 GHz			f	1	NN	
Freq Offse					-23.25	7 GHz			f	1	N	3
0 H												5
												7
												9
												1
											· · · · · ·	12

Product	:	VoIP Phone
Test Item	:	Maximum conducted output power
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)

Cable	e loss=1dB				Maximu	um cond	lucted o	utput po	ower	
			-	Γ	Data Rat	e (Mbps	s)	-		
Channel No.	Frequency (MHz)	15	30	45	60	90	120	135	150	Required Limit
			-	Measu	urement	Level (dBm)	-		
38	5190	13.12	13.05	12.98	12.93	12.88	12.82	12.78	12.76	<24dBm
46	5230	13.14								<24dBm
54	5270	13.14	13.05	12.99	12.91	12.84	12.75	12.69	12.66	<24dBm
62	5310	13.12								<24dBm
102	5510	13.23								<24dBm
110	5550	13.28	13.19	13.11	13.03	12.95	12.87	12.81	12.77	<24dBm
134	5670	13.14								<24dBm
151	5755	13.25	13.17	13.07	12.98	12.92	12.85	12.78	12.72	<30dBm
159	5795	13.33								<30dBm

Note: Maximum conducted output power Value =Reading value on average power meter + cable loss

Channel No	Frequency Range	26dB Bandwidth	Output Power	Output Po	ower Limit
	(MHz)	(MHz)	(dBm)	(dBm)	dBm+10log(BW)
38	5190		13.12	24	
46	5230		13.14	24	
54	5270	88.80	13.14	24	30.48
62	5310	84.75	13.12	24	30.28
102	5510	78.60	13.23	24	29.95
110	5550	86.40	13.28	24	30.37
134	5670	99.90	13.14	24	31.00
151	5755		13.25	30	
159	5795		13.33	30	

Maximum conducted output power Measurement:

Note: Power Output Value =Reading value on average power meter + cable loss



26dBc Occupied Bandwidth:

		annel 54	Una						
					wept SA	alyzer - Sw	trum Ana	nt Spec	Agile
12:21:56 AM Oct 29, 2014 TRACE 1 2 3 4 5 6	ALIGNAUTO Type: Log-Pwr	Avg		Hz	00000 G				× R Cer
			#Atten: 30 dB	PNO: Fast 😱 IFGain:Low	li pi				
2 5.224 40 GHz -25.16 dBm	Mkr				dBm	f 20.00	Ref	B/div	
A CONTRACTOR OF A CONTRACTOR OF A CONTRACTOR OF A CONTRACTOR A CONTRACTOR A CONTRACTOR A CONTRACTOR A CONTRACT		01		1 20 1				2 1 1 1	Log 10.0
	_	Long	broken phone	1-	-				0.00
		a de		-	.2		_		-10.0
-25.02 dBm	the france of the			Visition	Mallin and			· · · · · · · · · · · · · · · · · · ·	20.0
the second				1		12 Martin Carlo	-		-30.0
and a summing the set		1							-50.0
-							_		-60.0
8 143 m						1. Sec. 1.		1	-70.0
Span 150.0 MHz 1.00 ms (1001 pts)	Sweep		1.0 MHz	#VBW					
FUNCTION VALUE	FUNCTION WIDTH	FUNCTION	Y	د در ار بر در د	×				
			-25.16 dBm	40 GHz	5.224		1 1	N	1
			-28.87 dBm	20 GHz	5.313		1 f	N	3
									5
									7
		_						-	9 10
									11
	STATUS					-			MSG
	Span 150.0 MHz 1.00 ms (1001 pts)	ALIGNAUTO 12:21:56 AMOct 29, 2014 Type: Log-Pwr TRACE [1 2 3 4 5 6 Type MNNNN Mkr2 5.224 40 GHz -25.16 dBm -25.16 dBm -25.02 dbm -	T ALIGNAUTO 12:21:56 AMOCt 29, 2014 Avg Type: Log-Pwr TRACE 12 3 4 5 6 TYPE MWWWWW DET P NNNN Mkr2 5.224 40 GHz -25.16 dBm -25.16 dBm -25.02 dB	Avg Type: Log-Pwr TRACE 1 2 3 4 5 6 Trig: Free Run #Avg Type: Log-Pwr TPACE 1 2 3 4 5 6 Mkr2 5.224 40 GHz -25.16 dBm -25.16 dBm -25.02 dbm	Image: Sense:INT AugNauto 12:21:56 AMOct 29, 2014 Hz Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr Type I/P NNNN Mkr2 5.224 40 GHz -25.16 dBm Image: Sense:INT Avg Type: Log-Pwr Type I/P NNNN Mkr2 5.224 40 GHz -25.16 dBm Image: Sense:INT Mkr2 5.224 40 GHz -25.16 dBm Image: Sense:INT Image: Sense:INT <	rept SA ac sense::NT ALIGNAUTO 12:21:56 AMOct 29, 2014 Avg Type: Log-Pwr IFRACE [1 2 3 4 5 6 TYPE[MARKED] 2 3 5 6 TYPE[MAR	algzer Swept SA 50 Q AC SENSE:INT Augnauto 12:21:56 AMOct 29, 2014 5.2700000000 GHz Trig: Free Run Avg Type: Log-Pwr TRACE [1 2 3 4 5 6 PNO: Fast Trig: Free Run Mkr2 5.224 40 GHz -25.16 dBm 2	Imministration Sense (MT) ALIGNAUTO 12:21:56 AMOCt 29, 2014 Freq 5.270000000 GHz PN0: Fast IFGain:Low Trig: Free Run #Atten: 30 dB Avg Type: Log Pwr TRACE 1 2 3 4 5 6 Type (Muthow Det P NNNN Per P NNNN Ref 20.00 dBm -25.16 dBm -25.16 dBm 2 -25.02 den -25.02 den 3.27000 GHz WBW 1.0 MHz Span 150.0 MHz 5.27000 GHz *VBW 1.0 MHz Sweep 1.00 ms (1001 pts) 1 f 5.278 40 GHz 3.39 dBm 1 f 5.313 20 GHz -28.87 dBm 1 f 5.313 20 GHz -28.87 dBm	nt Spectrum Analyzer - Swept SA L RF 50 & AC SENSEINT AUGNAUTO 12:21:56 AMOCt 29, 2014 Avg Type: Log-Pwr TRACE 1 2 3 4 5 6 Trig: Free Run HEGain:Low Ref 20.00 dBm Atten: 30 dB MKr2 5.224 40 GHz -25.16 dBm 2 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

Channel 54

Channel 62

12:25:52 AM Oct 29, 2014	ALIGNAUTO		SENSE:IN		AC	50 Ω	RF	1.1.1	RL
TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	pe: Log-Pwr		Trig: Free Run #Atten: 30 dB	PNO: Fast 💭		.31000	req 5	er Fr	en
5.266 65 GHz -29.41 dBm	Mkr2				dBm	20.00 c	Ref	/div	
									9 0.0 .00
-24.48 dBm	Through and			Cargender"	A BANK	aphaner and the	gjol unger	Sperson	0.0 0.0 0.0
									0.0 0.0 0.0
			1.0 MHz	#VBW			680 H	BW	Res
FUNCTION VALUE	UNCTION WIDTH	FUNCTION	4 15 dBm						
			-29.41 dBm -26.20 dBm	55 GHz	5.266		f	N 1	2 3 4 5
									6 7 8 9
4	25.266 65 GHz -29.41 dBm	Wpe: Log-Pwr TRACE 1 2 3 4 5 5 Type Mwwwww Type Mwwwww Mkr2 5.266 65 GHz -29.41 dBm 29.41 dBm -24.48 dBm	Avg Type: Log-Pwr TRACE [123455 TYPE [WWWWW DET P NNNN Mkr2 5.266 65 GHz -29.41 dBm -24.48 dBm -24.48 dBm Span 150.0 MHz Sweep 1.00 ms (1001 pts)	Avg Type: Log-Pwr Trace 12 3 4 5 6 Trig: Free Run Mkr2 5.266 65 GHz - Mkr2 5.266 65 GHz - - -29.41 dBm - - 1 - - - 1 - - - - 1 - - - - 1 - - - - - 1 - - - - - - 1 -<	Hz Avg Type: Log-Pwr TFACE 1 2 3 45 0 TYPE TRACE 1 2 3 45 0 TyPE <thtrace 0<br="" 1="" 2="" 3="" 45="">TyPETyPE</thtrace>	ODOO GHz Trig: Free Run Avg Type: Log-Pwr TRACE 12.3.4.5.6 PN0: Fast IFGain:Low Trig: Free Run Mkr2 5.266 65 GHz -29.41 dBm IBm -29.41 dBm -29.41 dBm -24.48 dBm 2	Avg Type: Log-Pwr PN0: Fast PN0: Fast Free Run #Atten: 30 dB Mkr2 5.266 65 GHz 20.00 dBm 1 20.00 dBm 1 4 4 4 4 4 4 4 4 4 4 4 4 4	PN0: Fast Trig: Free Run Avg Type: Log-Pwr TRACE 1 2 3 4 5 6 PN0: Fast Trig: Free Run Mkr2 5.266 65 GHz -29.41 dBm Ref 20.00 dBm -29.41 dBm -29.41 dBm 2 -3 -2448 dBm 2 -2448 dBm -2448 dBm 3 -2448 dBm -2448 dBm 3 -2448 dBm -2448 dBm 4 -29.41 dBm -2448 dBm 2 -2448 dBm -2448 dBm 2 -2448 dBm -2448 dBm 3 -2448 dBm -2448 dBm 3 -2448 dBm -2448 dBm 4 -22.41 dBm -2448 dBm 51000 GHz #VBW 1.0 MHz Sweep 1.00 ms (1001 pts) 52 -22.93 80 GHz -22.91 dBm 7 -22.93 80 GHz -22.91 dBm	Iter Freq 5.310000000 GHz Trig: Free Run #Atten: 30 dB Avg Type: Log-Pwr TRACE 1 2 3 4 5 6 Type: I www.www. Derl P NN NN NN 3/div Ref 20.00 dBm -29.41 dBm -29.41 dBm 2

					Chan	nel 102				
	ectrum	Analyzer - S								
RL	-	RF 50			SENSE:INT		NAUTO	12:30:14 AM Oct 2 TRACE 1 2		Frequency
Center Freq 5.510000000 GHz PNO: Fast G IFGain:Low					Trig: Free Run #Atten: 30 dB	Avg Type: Lo	Avg Type: Log-Pwr		NNNN NNNN	
10 dB/di	v R	tef 20.00	dBm	22			Mkr2	5.474 30 -25.33 c		Auto Tun
Log		1 1 1 1 1 1	0.000	· · · · · ·	1	h1		1 T. A. 1 V		
10.0					1000 E. 1055	P.				Center Free
0.00			-	1	T	1				5.510000000 GH
-10.0		-		1		1			-	
-20.0			♦2	Maprin		Marchild L.	\wedge^{3}	-24	4.17 dBm	Start Free
-30.0		-	Mar Manna				and the state	hone.		5.435000000 GH
-40.0	herechof	As borning and						WI With and a straight of the	at Allhour	5.435000000 GH
-50.0	Aue .								wallines.	
-60.0									-	Stop Fre
-70.0										5.585000000 GH
-70.0		1.0	1.000			·		2 I.L.		la superior de
		000 GHz		Sec. 3	6.13.7 -			Span 150.0		CF Ste
#Res B	W 56	0 kHz	-	#VB۱	V 1.0 MHz	SV	veep 1.	00 ms (1001	l pts)	15.000000 MH
MKR MODE		SCL	X		Y	FUNCTION FUNCTIO	N WIDTH	FUNCTION VALU	E	Auto Ma
1 N		f		45 GHz	4.14 dBm					
2 N 3 N		f f		30 GHz 90 GHz	-25.33 dBm -27.20 dBm		-		-	Freq Offse
4										0 H
5		-								U.I.
7										
8							-			
10										
11							-		-	
	di sete	1					Line and			
ASG							STATUS			

Channel 102

Channel 110

Frequency	26 AM Oct 29, 2014		ALIGNAUTO		SE	RF 50 Q AC				-		R
	RACE 123456	Avg Type: Log-Pwr TRACE				enter Freq 5.550000000 GHz				en		
-	PNO: Fast DIFGain:Low #Atten: 30 dB											
Auto Tun	8 15 GHz 4.87 dBm					11	dBm	20.00	Ref	v	B/div	
Center Fre		- 1 -	01	11	1	<u></u>	12-11-			1	71	.og
5.55000000 GH			- M	minimum	- alter and	1			1			0.00
			1		-	N.		_			_	10.0
-	-22.90 dDm	3	- Sold			Chilles White	2				_	20.0
Start Fre 5.475000000 GH		A SAMA WALL					10-40-10-1	- And		_	10	30.0
5.475000000 GF	Mana man				-	1	-	aline	anyle	house	1000	40.0
(I LANTA I			-	-		-	-	-		_	-	50.0
Stop Fre			-	-	-			-	-		-	60.0
5.625000000 GH				-		-					-	70.0
05.044	150.0 MHz	S						GHz	5000	5.5	ter	:en
CF Ste 15.000000 MH	s (1001 pts)			Hz	W 1.0 MHz	#VB		Hz	80 k	W 6	s B	Re
<u>Auto</u> Ma	CTION VALUE	ION WIDTH	CTION FUN		Y		X			TRC	MODE	
					7.45 d	65 GHz 15 GHz			f	1	N	1
Freq Offse					-24.92 d	5.594 55 GHz			f	1	N	3
0 H												5
											-	6
		_								_		8
						1.1						10
				-					-	-	_	11 12
											-	12

_					Chan	nel 134						
	pectrum	Analyzer -										
a _{RL} Cente	r Fre		0Ω AC 10000000 GI F IF	Hz NO: Fast ⊂ Gain:Low	SENSE:INT Trig: Free Run #Atten: 30 dB		ALIGNAUTO Avg Type: Log-Pwr		AMOCt 29, 2014 ACE 1 2 3 4 5 6 ACE M ANNIN ACE P NNNNN ACE P NNNNN	Frequency		
Mkr2 5.621 10 GHz 10 dB/div Ref 20.00 dBm -22.35 dBm												
.09 10.0				5	1	-				Center Fre 5.670000000 GH		
20.0	WWW M	matiti	2 And a strate frame				mannahar	A Rock work	-21.75 dBm	Start Fre 5.595000000 GH		
50.0 50.0 70.0										Stop Fre 5.745000000 GH		
Res E	BW 82	000 GH: 20 kHz	z	#VBV	V 1.0 MHz		Service Brown	1.00 ms	150.0 MHz (1001 pts)	CF Ste 15.000000 MH Auto Ma		
KE MOD 1 N 2 N 3 N	1	SCL f f f	5.668 2 5.621 7 5.721 0	0 GHz	7.37 dBm -22.35 dBm -24.11 dBm	UNCTION	CTION WIDTH	FUNCTI	ON VALUE	Freq Offs		
4 5 6 7										0 H		
8 9 10 11 12												
ISG	the state						STATUS	i r				

Channel 134

4. Peak Power Spectral Density

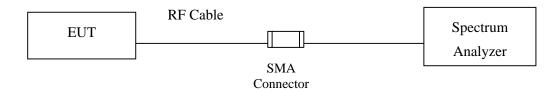
4.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2014
Х	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr, 2014

Note:

- 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
- 2. The test instruments marked with "X" are used to measure the final test results.

4.2. Test Setup



4.3. Limits

(1) For the band 5.15-5.25 GHz,

(i) For an outdoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(ii) For an indoor access point operating in the band 5.15-5.25 GHz, the maximum power spectral density shall not exceed 17 dBm in any 1 megahertz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

(iii) For fixed point-to-point access points operating in the band 5.15-5.25 GHz, the maximum conducted output power over the frequency band of operation shall not exceed 1 W. Fixed point-topoint U-NII devices may employ antennas with directional gain up to 23 dBi without any corresponding reduction in the maximum conducted output power or maximum power spectral density. For fixed point-to-point transmitters that employ a directional antenna gain greater than 23 dBi, a 1 dB reduction in maximum conducted output power and maximum power spectral density is required for each 1 dB of antenna gain in excess of 23 dBi. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the

equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations. (**iv**) For mobile and portable 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, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.+

- (2) For the 5.25-5.35 GHz and 5.47-5.725 GHz bands, 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, 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 5.725-5.85 GHz, the maximum power spectral density shall not exceed 30 dBm in any 500-kHz band. If transmitting antennas of directional gain greater than 6 dBi are used, the maximum power spectral density shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi. However, fixed point-to-point UNII devices operating in this band may employ transmitting antennas with directional gain greater than 6 dBi without any corresponding reduction in transmitter conducted power. Fixed, point-to-point operations exclude the use of point-to-multipoint systems, omnidirectional applications, and multiple collocated transmitters transmitting the same information. The operator of the U-NII device, or if the equipment is professionally installed, the installer, is responsible for ensuring that systems employing high gain directional antennas are used exclusively for fixed, point-to-point operations.

4.4. Test Procedure

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

The Peak Power Spectral Density using KDB 789033 section F) procedure, Create an average power spectrum for the EUT operating mode being tested by following the instructions in section E)2) for measuring maximum conducted output power using a spectrum analyzer.

SA-1 method is selected to run the test.

For the band 5.725-5.85 GHz, Scale the observed power level to an equivalent value in 500 kHz by adjusting (increase) the measured power by a bandwidth correction factor (BWCF) where $BWCF = 10\log (500 \text{ kHz}/100 \text{ kHz}) = 6.98 \text{ dB}.$

4.5. Uncertainty

± 1.27 dB

4.6. Test Result of Peak Power Spectral Density

Product	:	VoIP Phone
Test Item	:	Peak Power Spectral Density
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)

Channel Number	Frequency (MHz)	Data Rata (Mbps)	Measurement Level (dBm)	Required Limit (dBm)	Result
36	5180	6	3.480	17	Pass
44	5220	6	3.050	17	Pass
48	5240	6	3.180	17	Pass
52	5260	6	3.090	11	Pass
60	5300	6	3.060	11	Pass
64	5320	6	2.880	11	Pass
100	5500	6	3.820	11	Pass
116	5580	6	5.730	11	Pass
140	5700	6	5.670	11	Pass

Channel Number	Frequency (MHz)	Data Rata (Mbps)	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
149	5745	6	6.44	6.98	13.42	<30	Pass
157	5785	6	6.11	6.98	13.09	<30	Pass
165	5825	6	6.01	6.98	12.99	<30	Pass



A REAL PROPERTY AND A REAL PROPERTY AND A REAL PROPERTY.					
Agilent Spectrum Analyzer - Swe RL RF 50 Ω		SENSE:INT	ALIGNAUTO	10:07:38 PM Oct 28, 2014	1
Center Freq 5.18000	0000 GHz	1.1.1.1.1.1.1.1.1	#Avg Type: RMS	TRACE 1 2 3 4 5 6	Frequency
10 dB/div Ref 20.00 d	PNO: Fast Ģ IFGain:Low	j Trig: Free Run #Atten: 30 dB	Mkr1	5.187 400 GHz 3.48 dBm	Auto Tun
10.0				1	Center Fre 5.180000000 GH
10.0					Start Fre 5.167500000 GH
20.0				M March and a state of the state	Stop Fre 5.192500000 GH
40.0					CF Ste 2.500000 MH Auto Ma
60,0					Freq Offs 0 F
70.0					
Center 5.18000 GHz #Res BW 1.0 MHz	#VBV	V 3.0 MHz	Sweep	Span 25.00 MHz 1.00 ms (1001 pts)	
ASG			STATUS		

Channel 36:

Channel 44:





	n Analyzer - Swept SA					
RL Contor Fro	RF 50 Ω AC	CH2	SENSE:INT	ALIGNAUTO #Avg Type: RMS	10:18:52 PM Oct 28, 2014 TRACE 1 2 3 4 5 6	Frequency
	Ref 20.00 dBm	PNO: Fast 🖵 IFGain:Low	Trig: Free Run #Atten: 30 dB	- 67 - 777 201	5.232 850 GHz 3.18 dBm	
10.0	1					Center Fre 5.240000000 GH
10.00		Y				Start Fre 5.227500000 GH
-20.0	why with a				No WY Harder House	Stop Fre 5.252500000 GH
40.0						CF Ste 2.500000 MH Auto Ma
60.0						Freq Offs 0 F
70.0						
Center 5.24 #Res BW 1.		#VBW	3.0 MHz	Sweep	Span 25.00 MHz 1.00 ms (1001 pts)	
ASG				STATUS		<u>R</u>

Channel 48:

Channel 52:





	rum Analyzer - Swept SA					
RL	RF 50 Ω AC		SENSE:INT	ALIGNAUTO	10:33:34 PM Oct 28, 2014	Frequency
Center F	req 5.30000000) GHZ PNO: Fast 😱 IFGain:Low	Trig: Free Run #Atten: 30 dB	#Avg Type: RMS	TRACE 1 2 3 4 5 6 TYPE A WAVAWAY DET A N N N N N	Trequency
10 dB/div	Ref 20.00 dBm			Mkr1	5.307 050 GHz 3.06 dBm	Auto Tun
					1	Center Fre
10.0				¹		5.300000000 GH
0.00			A CONTRACTOR OF THE OWNER OWNER OF THE OWNER OWNE		1	Start Fre
10.0					1	5.287500000 GH
20.0	ment and a start				Municipaning	Otop Erro
30.0						Stop Fre 5.312500000 GH
30.0					100	
40,0						CF Ste 2.500000 MH Auto Ma
50,0				-		
60.0						Freq Offs
						0+
70.0			in film i		1000	
	30000 GHz				Span 25.00 MHz	
#Res BW	1.0 MHz	#VBW	3.0 MHz		1.00 ms (1001 pts)	
ISG				STATUS		

Channel 60:

Channel 64:





		Inamer 10	J.		
Agilent Spectrum Analyzer - Swept SA KI RL RF 50 Ω AC	T	OF NOT AN IT			
RL RF 50Ω AC Center Freq 5.500000000	GHz	SENSE:INT	ALIGNAUTO #Avg Type: RMS	10:42:21 PM Oct 28, 2014 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast IFGain:Low	Trig: Free Run #Atten: 30 dB	1997 - 2007 - 2007 1997 - 2007	TYPE A WWWWW DET A N N N N	
10 dB/div Ref 20.00 dBm			Mkr1	5.492 550 GHz 3.82 dBm	
-vg					Center Fre
10.0					5.50000000 GH
			In the second	-	
0.00				N. N	Start Fre
10.0	_			1	5.487500000 GH
20.0				S. Mary Mary and Constant	
					Stop Fre 5.512500000 GH
30.0			· · · · · · · · · · · · · · · · · · ·		
40.0					CF Ste
200					2.500000 MH Auto Ma
50.0					Auto
					Freq Offse
60.0					0 H
70.0					
				2.000	
Center 5.50000 GHz #Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep	Span 25.00 MHz 1.00 ms (1001 pts)	
ASG		Clow esseres	STATUS		
			1 12/11/23		

Channel 100:

Channel 116:

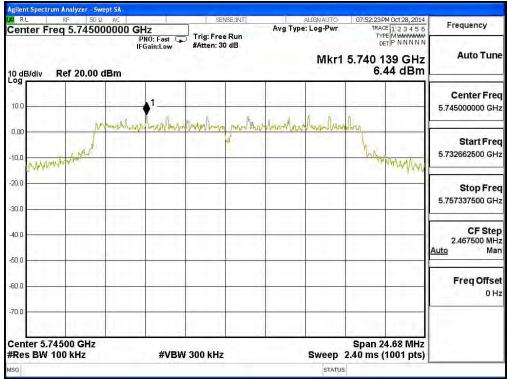




			Inannel 14	J.		
	um Analyzer - Swept SA					
RL	RF 50 Ω AC		SENSE:INT	ALIGNAUTO	11:04:44 PM Oct 28, 2014	
Center Fi	req 5.70000000	PNO: Fast 😱 IFGain:Low	Trig: Free Run #Atten: 30 dB	#Avg Type: RMS	TRACE 1 2 3 4 5 6 TYPE A WARAWAY DET A N N N N N	
10 dB/div	Ref 20.00 dBm			Mkr1	5.707 425 GHz 5.67 dBm	
Jug						Center Fre
10.0				· · · · · · · · · · · · · · · · · · ·	1	5.70000000 GH
10.0		and the second	Section Process	A second second	-	5.70000000 GH
0.00	1					
0.00						Start Fre
100	1				× ·	5.687500000 GH
-10.0	~					0.0010000000011
and a second		1 1 1 1 1 1 1 1 1 1				
-20.0						Stop Fre
						5.712500000 GH
-30.0						
						-
-40.0						CF Ste 2.500000 MH
D. I. I.						Auto Ma
-50,0						
		1.1.1.1.1.1.1.1				F
-60.0				1		Freq Offse
		1.1				0 H
70.0		1 1 1				
20.0			in Charles	1		
				· · · · · · · · · · · · · · · · · · ·	· · · · · · · · ·	
Center 5.7 #Res BW	70000 GHz 1.0 MHz	#VBW	3.0 MHz	Sweep	Span 25.00 MHz 1.00 ms (1001 pts)	
ASG				STATUS		11
100 M				1 17 71 77 7		

Channel 140:

Channel 149

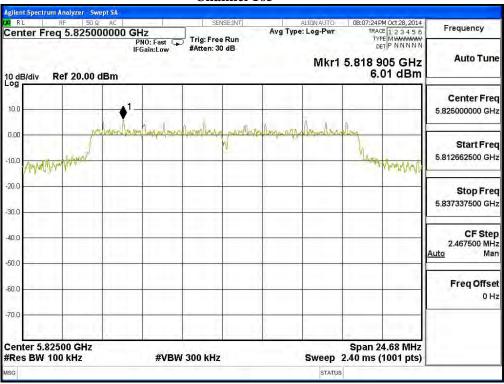




			Channel	157		
	trum Analyzer - Swept Si	V				
RL	RF 50 Ω AC		SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	07:59:55 PM Oct 28, 201	
Center I	req 5.7850000	PNO: Fast G IFGain:Low	Trig: Free Run #Atten: 30 dB	Avg Type: Log-Pwr	TRACE 1 2 3 4 5 1 TYPE MWWWWW DET P N N N N	
10 dB/div	Ref 20.00 dBn	'n		Mkr1	5.778 930 GHz 6.11 dBm	
Log						Center Freq
10.0		↑ 1	an X	1	0	5.785000000 GHz
0.00	Berry mil	Magn Apal-a	hoard man asalla	and many proper bearing on	aring	
-10.0	a start		-v.		Manufactor	Start Freq 5.772662500 GHz
17ml	hanna				- TAMAYA	
-20.0						Stop Freq 5.797337500 GHz
-40.0						CF Step
						2.467500 MHz <u>Auto</u> Man
-50.0						
-60.0						Freq Offset 0 Hz
-70.0						
	.78500 GHz / 100 kHz	#\/R\	V 300 kHz	Sween	Span 24.68 MHz 2.40 ms (1001 pts	
MSG		<i>n</i> v D v	1 000 MIZ	STATU	Sector and the sector of the	/
inog			_	31/10	Y	

Channel 157

Channel 165



:	VoIP Phone
:	Peak Power Spectral Density
:	No.3 OATS
:	Mode 2: Transmit (802.11n-20BW 7.2Mbps)
	:

Channel Number	Frequency (MHz)	Data Rata (Mbps)	Measurement Level (dBm)	Required Limit (dBm)	Result
36	5180	7.2	2.400	17	Pass
44	5220	7.2	1.720	17	Pass
48	5240	7.2	1.700	17	Pass
52	5260	7.2	1.340	11	Pass
60	5300	7.2	1.550	11	Pass
64	5320	7.2	2.020	11	Pass
100	5500	7.2	2.860	11	Pass
116	5580	7.2	3.480	11	Pass
140	5700	7.2	4.610	11	Pass

Channel Number	Frequency (MHz)	Data Rata (Mbps)	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
149	5745	7.2	5.57	6.98	12.55	<30	Pass
157	5785	7.2	5.23	6.98	12.21	<30	Pass
165	5825	7.2	4.94	6.98	11.92	<30	Pass

Channel 36:

RL	RF 50 Ω AC		SENSE:INT	ALIGNAUTO	11:09:14 PM Oct 28, 2014	-
Center	Freq 5.18000000	0 GHz	Trig: Free Run	#Avg Type: RMS	TRACE 1 2 3 4 5 6 TYPE A WWWWW	Frequency
10 dB/div	/ Ref 20.00 dBm	PNO: Fast 😱 IFGain:Low	#Atten: 30 dB	Mkr1	5.187 825 GHz 2.40 dBm	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
-og 10.0	+				▲1	Center Fre 5.180000000 GH
10.00	1					Start Fre 5.167500000 GH
-20.0	www.march				Manton Carton	Stop Fre 5.192500000 GH
40.0						CF Ste 2.500000 MH Auto Ma
60.0						Freq Offso 0 H
-70.0	5.18000 GHz				Cnop 25 00 Mile	
	5.18000 GHZ W 1.0 MHz	#VBW	3.0 MHz	Sweep	Span 25.00 MHz 1.00 ms (1001 pts)	
ISG				STATUS		

Channel 44:

		•	Channel 44							
					Analyzer - Swept SA	Agilent Spectru				
Frequency	11:12:36 PM Oct 28, 2014	ALIGNAUTO	SENSE:INT		RF 50 Ω AC	XI RL				
Frequency	TRACE 1 2 3 4 5 6 TYPE A WARAWAY DET A N N N N N	#Avg Type: RMS	Trig: Free Run #Atten: 30 dB	PNO: Fast 💭	5.220000000	Center Fr				
Auto Tun	5.227 800 GHz 1.72 dBm	Mkr1	#Atten: 30 dB	IFGain:Low	IFGain:Low					
Center Fre										
5.220000000 GH	1					10.0				
Start Fre					10000	0.00				
5.207500000 GH				_	1	-10.0				
Stop Fre	han				<u> </u>	20.0				
5.232500000 GH	Comparts.					30.0				
CF Ste	-					40.0				
2.500000 MH Auto Ma						50.0				
Freq Offs										
01						60.0				
						70.0				
	Span 25.00 MHz 1.00 ms (1001 pts)	Sween	3.0 MHz	#\/B\//		Center 5.2 #Res BW 1				
	ins (1001 pts)	100 m 100	J.V IVINZ	#VDVV .						
		STATUS				ASG				



6 Frequency						ept SA	m Analyzer - Sw	ilent Spectru
6 Frequency								and a second
	11:16:31 PM Oct 28, 2014	ALIGNAUTO	1	SENSE:INT		AC		RL
	TRACE 1 2 3 4 5 6 TYPE A WANAAAAA	RMS	#Avg Typ	Tatas Para Para			eq 5.2400	enter Fr
N	DET A NNNNN			Trig: Free Run #Atten: 30 dB	NO: Fast 😱 Gain:Low	P		
- Auto Tun	5 040 475 CU-	Baland			Gameow			
2	5.248 175 GHz	WIKFT						
n	1.70 dBm					dBm	Ref 20.00) dB/div
Contraction								- 3
Center Fre								0.0
5.24000000 GH	A1							U.U
Otort Fra				and the second s			1	1,00
Start Fre	1							
5.227500000 GH		-	-		+ +	1	1	0.0
							1	
Oton Ero	No.						with	0.0
Stop Fre	mound							an part of the or
5.252500000 GH					d		_	0.0
						1	1.1.1.1.1.1	
CF Ste								0.0
2.500000 MH								0,0
Auto Ma							1.11.11.1	
					1 1	1	-	0,0
Freq Offse							(1) (1) (1)	11 Provide State
		-	-			-		0.0
0 H	1 million (1 million (1.11
-		_						0.0
	a construction of			in the second			i litera t	
	·	_				·	1	· · · · ·
Z	Span 25.00 MHz						4000 GHz	
5)	1.00 ms (1001 pts)	Sweep 1		3.0 MHz	#VBW		.0 MHz	Res BW '
	1	STATUS						G

Channel 48:

Channel 52:





					nel 60	_nam					
ř.									Analyzer - S		
Frequency	129:07 PM Oct 28, 2014 TRACE 1 2 3 4 5 6	1	ALIGNAUTO	#Avg	NSE:INT		GH7	2 AC			XI RL Cent
Auto Tune	92 900 GHz	Mkr1 5.292 900 GHz			e Run 0 dB	¹ Trig: Fre #Atten: 3	Center Freq 5.30000000 GHz PNO: Fast G IFGain:Low				
	1.55 dBm			~				dBm	lef 20.00	B/div F	10 dB
Center Free 5.300000000 GH;				_	-						10.0
		-						♦ ¹		1.1.1	
Start Free 5.287500000 GH:							- Tanju		f		0.00
Stop Free 5.312500000 GH:	A second second	-							, <u>/</u>	man harden and	-20.0
CF Stej 2,500000 MH									1		30.0
<u>Auto</u> Mai											-50,0 -
Freq Offse 0 H	_	-				-					60.0
		-		-						1	70.0
	oan 25.00 MHz ms (1001 pts)	S 1.00	Sweep			3.0 MHz	#VBW	•]•		ter 5.300 s BW 1.0	
L		IS	STATU								MSG

Channel 60:

Channel 64:





Agilent Spectrum Analyzer - Swep					
2 RL RF 50 Ω		SENSE:INT	ALIGNAUTO	11:40:43PM Oct 28, 2014	Frequency
Center Freq 5.500000	PNO: Fast IFGain:Low	Trig: Free Run #Atten: 30 dB	#Avg Type: RMS	TRACE 1 2 3 4 5 6 TYPE A WAXAWAA DET A N N N N N	
10 dB/div Ref 20.00 dE	3m		Mkr1	5.508 125 GHz 2.86 dBm	Auto Tun
					Center Fre
10.0				♦ ¹	5.50000000 GH
0.00				1	Start Fre
-10.0					5.487500000 GH
20.0				N. V. Validante and	Stop Fre
30.0					5.512500000 GH
40.0					CF Ste
40.0		100			2.500000 MH Auto Ma
50.0					
60.0					Freq Offs 0 H
70.0					
S					
Center 5.50000 GHz #Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep	Span 25.00 MHz 1.00 ms (1001 pts)	
ASG			STATUS	š	4 D-

Channel 100:

Channel 116:

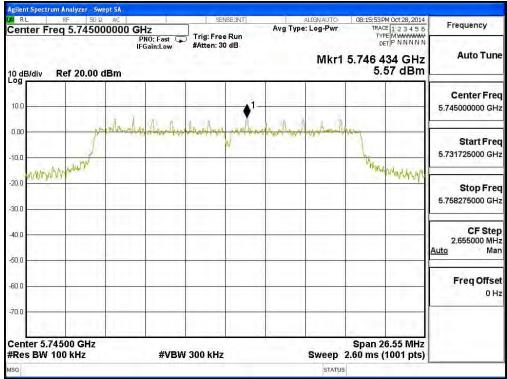




				Inaimer 14					
						inalyzer - Swept SA			
Frequency	12:09:05 AMOct 29, 2014	ALIGN AUTO		SENSE:INT		RF 50 Ω AC	RL		
	TRACE 1 2 3 4 5 6 TYPE A WAXAWAY DET A N N N N N	#Avg Type: RMS		Trig: Free Run #Atten: 30 dB	PNO: Fast IFGain:Low	enter Freq 5.700000000 GHz PNO: Fast IFGain:Low			
Auto Tun	10 dB/div Ref 20.00 dBm 4.61 dBm								
Center Fre									
5.70000000 GH						· · · · · · · · · · · · · · · · · · ·	10.0		
5.700000000 81						-			
1	No.		-				0.00		
Start Fre	1					1			
5.687500000 GH	h	-	-				-10.0		
	Walkinstein				10.000		Varionhear		
Stop Fre							-20.0		
5.712500000 GH									
							-30.0		
CF Ste							-40.0		
2.500000 MH							40,0		
<u>Auto</u> Ma							-50.0		
N. 100 100	L						220		
Freq Offs			-				60.0		
0 H									
			-				-70.0		
	1.11.11.11.11.11.11.11.11.11.11.11.11.1			100		it on this set			
	Span 25.00 MHz					00 GHz	Center 5.7		
	1.00 ms (1001 pts)	Sweep 1		3.0 MHz	#VBW		Res BW		
		STATUS					ISG		

Channel 140:

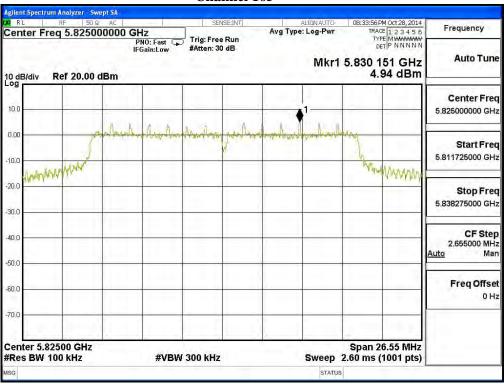
Channel 149



			51	Channel I							
	08:23:31 PM Oct 28, 2014	ALIGNAUTO		SENSE:INT			RF 50.0	nt Spectrum L			
Frequency	TRACE 1 2 3 4 5 6	: Log-Pwr	Avg Typ		z		q 5.78500				
a construction	TYPE MWWWWW DET P N N N N N			Trig: Free Run #Atten: 30 dB	IO: Fast 💭	PNO: Fast G IFGain:Low					
Auto Tune	5.786 430 GHz 5.23 dBm	Mkr1				0 dB/div Ref 20.00 dBm					
Center Free	1.1.1.1										
5.785000000 GH				↓ ¹							
1	Www.	monther	b ater brock	and and party port have	al martine	the allow	April 1				
Start Free 5.771762500 GH:	1			<i>V</i>			J.				
	manphastallant						Un phan Na	Around			
Stop Free	inter of a							A hard a second			
5.798237500 GH				_			-	_			
CF Ster											
2.647500 MH Auto Mar											
Freq Offse											
0 H:											
								1			
	Span 26.48 MHz					+	500 GHz	ter 5 79			
1	2.53 ms (1001 pts)	Sweep 2		300 kHz	#VBW			s BW 10			
		STATUS									

Channel 157

Channel 165



Product	:	VoIP Phone
Test Item	:	Peak Power Spectral Density
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps)

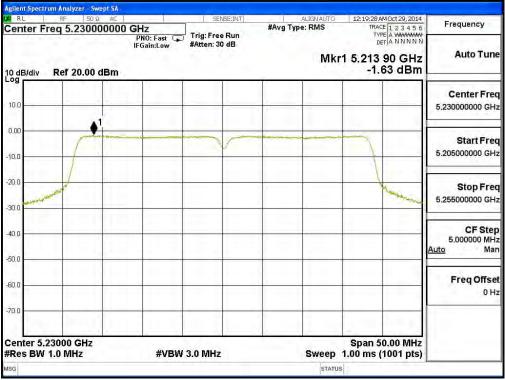
Channel Number	Frequency (MHz)	Data Rata (Mbps)	Measurement Level (dBm)	Required Limit (dBm)	Result
38	5190	15	-1.220	17	Pass
46	5230	15	-1.630	17	Pass
54	5270	15	-1.700	17	Pass
62	5310	15	-1.350	11	Pass
102	5510	15	-1.020	11	Pass
110	5550	15	0.130	11	Pass
134	5670	15	0.940	11	Pass

Channel Number	Frequency (MHz)	Data Rata (Mbps)	PPSD (dBm)	BWCF (dB)	Total PPSD (dBm)	Required Limit (dBm)	Result
151	5755	15	2.62	6.98	9.60	<30	Pass
159	5795	15	1.91	6.98	8.89	<30	Pass

			Channel	38		
	Analyzer - Swept	SA.				
RL Center Fre	RF 50 Ω /		SENSEIINT	ALIGNAUTO #Avg Type: RMS	12:15:35 AM Oct 29, 2014 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast Trg: Free Kun IFGain:Low #Atten: 30 dB Mkr1 5.207 40 GHz dB/div Ref 20.00 dBm -1.22 dBm					
10.0						Center Fred 5.190000000 GH:
0.00	1				1	Start Free 5.165000000 GH:
20.0	wal				a the life a marrie	Stop Free 5.215000000 GH;
40.0						CF Step 5.000000 MH Auto Mar
60.0						Freq Offse 0 H
-70.0 Center 5.19	000 GHz				Span 50.00 MHz	
#Res BW 1.		#VBW	3.0 MHz	Sweep	1.00 ms (1001 pts)	
MSG				STATUS		

Channel 28

Channel 46

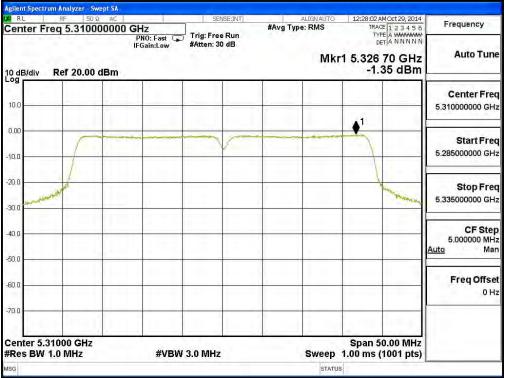




					1el 54	Juan				
									um Analyzer	
Frequency	23:39 AM Oct 29, 2014 TRACE 1 2 3 4 5 6	12;	ALIGNAUTO	#Ava 1	NSE:INT	SE	CH2	50 Ω AC		RL
Auto Tun	TYPE A WANAWAY DET A N N N N N	35				Trig: Fre #Atten: 3	PNO: Fast 🖵 IFGain:Low	000000	ieq 3.27	enter r
Auto Tun	273 65 GHz -1.70 dBm	r1 5.:	Mkr					0 dBm	Ref 20.	0 dB/div
Center Fre										°g
5.270000000 GH			-			_				10.0
5.270000000 81										
Otout Fas	-	-			1			and the second		0.00
Start Fre 5.245000000 GH	1				V.					
5.245000000 GP	1	1		1	-				T	10.0
										20.0
Stop Fre 5.295000000 GH	Million of Marcal					1.2			-so-malala	30.0
05.044		1.0							1. 17 -	
CF Ste 5.000000 MH		+	-	1	-					40.0
<u>Auto</u> Ma										
				1				-		50.0
Freq Offse							1.1.1.1.1.1			
0 H		1								60.0
						_				70.0
	the latest		1.					111		
	an 50.00 MHz ms (1001 pts)	Sp	Swoon			3.0 MH;	#\/P\/	z	27000 GH 1.0 MHz	
	ms (1001 pts)				-	3.0 IVIH2	#VBVV	_	1.0 WHZ	
		JS	STATUS							SG

Channel 54

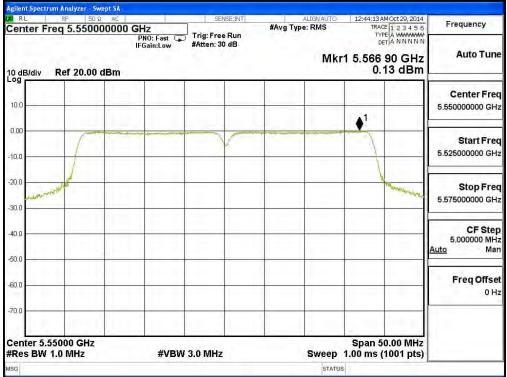
Channel 62



		Channel I]2		
Agilent Spectrum Analyzer - Swept S					
RL RF 50Ω A Center Freq 5.5100000		SENSE:INT	ALIGNAUTO #Avg Type: RMS	12:32:30 AM Oct 29, 2014 TRACE 1 2 3 4 5 TYPE A WAWAWA DET A N N N N	Frequency
10 dB/div Ref 20.00 dBr	IFGain:Low	#Atten: 30 dB	Mkr	DET A NNNN 1 5.526 40 GHz -1.02 dBm	Auto Tune
10.0					Center Fred 5.510000000 GH;
10.0				×1	Start Free 5.485000000 GH:
-20.0				A A A A A A A A A A A A A A A A A A A	Stop Free 5.535000000 GH;
40.0					CF Stej 5.000000 MH <u>Auto</u> Ma
60.0					Freq Offse 0 H
-70.0 Center 5.51000 GHz				Span 50.00 MHz	
#Res BW 1.0 MHz	#VBW	3.0 MHz	Sweep	1.00 ms (1001 pts	

Channel 102

Channel 110

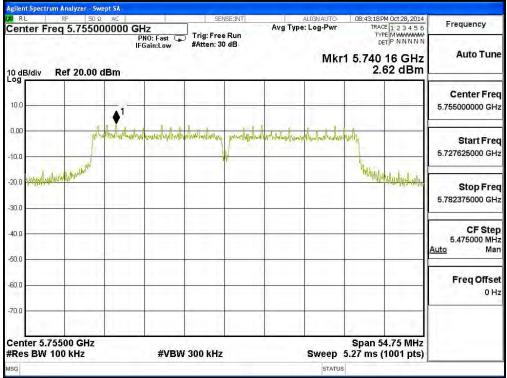




		(Channel 13	34			
Agilent Spectrum An	alyzer - Swept SA						
Center Freq			SENSE:INT	ALIGN #Avg Type: RN	AS TI	COAMOCT 29, 2014	Frequency
10 dB/div Rel	f 20.00 dBm	PNO: Fast 🖵 IFGain:Low	#Atten: 30 dB		Mkr1 5.65	TYPE A WAAWAA DET A N N N N N 3 20 GHz 0.94 dBm	Auto Tune
10.0	1						Center Freq 5.670000000 GHz
-10.0							Start Freq 5.645000000 GHz
-20.0	<u>/</u>					Conversion the	Stop Freq 5.695000000 GHz
40.0							CF Step 5.000000 MH Auto Mar
60.0							Freq Offset 0 Hz
-70.0			-			line p	
Center 5.6700 #Res BW 1.0 I		#VBW	3.0 MHz	Sw	Span veep 1.00 ms	50.00 MHz s (1001 pts)	
MSG					STATUS		

al 13/ CI

Channel 151





		Chann	el 159		
Agilent Spectrum Analyzer - S					
RL RF 50 Center Freq 5.7950		SENSE:INT	ALIGNAUTO Avg Type: Log-Pwr	08:52:37 PM Oct 28, 2014 TRACE 1 2 3 4 5 6	Frequency
	PNO: Fast C IFGain:Low	Trig: Free Run #Atten: 30 dB		DET P N N N N	
10 dB/div Ref 20.00	dBm		Mkr	1 5.780 16 GHz 1.91 dBm	
Log					Center Freq
10.0	▲1.				5.795000000 GHz
0,00	the book as to provide the	Application mainsel	and and have the set of the	Arrini .	Start Freq
-10.0		1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1			5.767625000 GHz
-20.0 Minder hundralter				What What what was	Otop Eron
-30.0					Stop Freq 5.822375000 GHz
				()) Tel	CF Step
-40.0					5.475000 MHz Auto Man
-50.0				1	
-60.0					Freq Offset 0 Hz
-70.0					
Center 5.79500 GHz #Res BW 100 kHz		W 300 kHz	Sween	Span 54.75 MHz	
#Res BW 100 KHZ	#VB	W JOU KHZ	Sweep	5.27 ms (1001 pts)	
134			314103		

Channel 159

5. Radiated Emission

5.1. Test Equipment

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

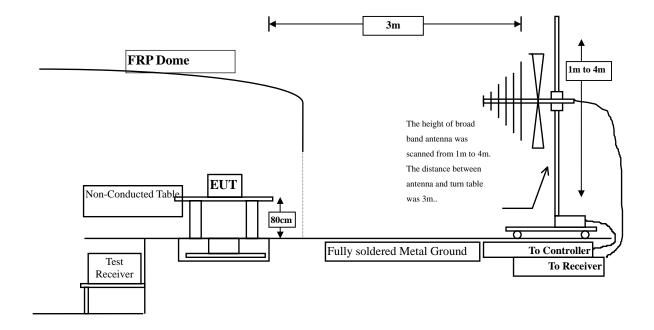
Test Site	Equipment		Manufacturer	Model No./Serial No.	Last Cal.
Site # 3	Х	Loop Antenna	Teseq	HLA6121 / 37133	Sep., 2014
	Х	Bilog Antenna	Schaffner Chase	CBL6112B/2673	Sep., 2014
	Х	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2014
	Х	Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2014
	Х	Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2014
	Х	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2014
	Х	Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar., 2014
	Х	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2014
	Х	Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2014
	Х	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2014
	Х	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	Х	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Note: 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.

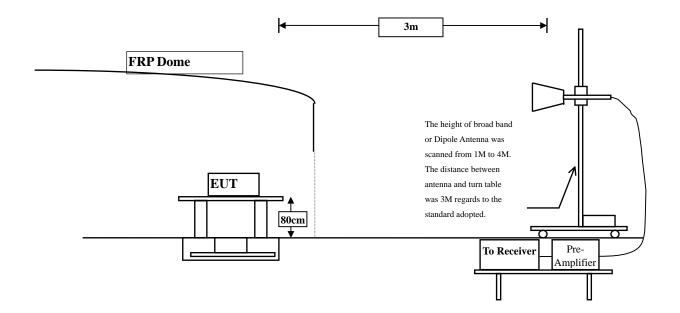
2. The test instruments marked with "X" are used to measure the final test results.

5.2. Test Setup

Radiated Emission Below 1GHz



Radiated Emission Above 1GHz



5.3. Limits

Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 20dB below the level of the fundamental or to the general radiated emission limits in paragraph 15.209, whichever is the lesser attenuation.

FCC Part 15 Subpart C Paragraph 15.209(a) Limits							
Frequency MHz	Field strength (microvolts/meter)	Measurement distance (meter)					
0.009-0.490	2400/F(kHz)	300					
0.490-1.705	24000/F(kHz)	30					
1.705-30	30	30					
30-88	100	3					
88-216	150	3					
216-960	200	3					
Above 960	500	3					

Remarks: E field strength ($dB\mu V/m$) = 20 log E field strength (uV/m)

5.4. Test Procedure

The EUT was setup according to ANSI C63.10, 2009 and tested according to FCC KDB-789033 test procedure for compliance to FCC 47CFR 15. 407 requirements.

The EUT is placed on a turn table which is 0.8 meter above ground. The turn table is rotated 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna is scanned from 1 meter to 4 meters to find out the maximum emission level. This is repeated for both horizontal and vertical polarization of the antenna. In order to find the maximum emission, all of the interface cables were manipulated according to ANSI C63.10, 2009 on radiated measurement.

The resolution bandwidth below 30MHz setting on the field strength meter is 9kHz and 30MHz~1GHz is 120kHz and above 1GHz is 1MHz.

Radiated emission measurements below 30MHz are made using Loop Antenna and 30MHz~1GHz are made using broadband Bilog antenna and above 1GHz are made using Horn Antennas. The measurement is divided into the Preliminary Measurement and the Final Measurement. The suspected frequencies are searched for in Preliminary Measurement with the measurement antenna kept pointed at the source of the emission both in azimuth and elevation, with the polarization of the antenna oriented for maximum response. The antenna is pointed at an angle towards the source of the emission, and the EUT is rotated in both height and polarization to maximize the measured emission. The emission is kept within the illumination area of the 3 dB bandwidth of the antenna. The worst radiated emission is measured in the Open Area Test Site on the Final Measurement.

5.5. Uncertainty

- ± 3.8 dB below 1GHz
- ± 3.9 dB above 1GHz

5.6. Test Result of Radiated Emission

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5180MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
10360.000	10.932	39.339	50.271	-23.729	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10360.000	12.436	38.794	51.229	-22.771	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5220MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10440.000	9.725	39.997	49.722	-24.278	74.000
15660.000	*	*	*	*	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10440.000	11.505	39.663	51.168	-22.832	74.000
15660.000	*	*	*	*	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5240MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
10480.000	10.464	39.579	50.042	-23.958	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10480.000	12.399	38.822	51.221	-22.779	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5260MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10520.000	11.531	39.591	51.122	-22.878	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10520.000	13.441	38.789	52.230	-21.770	74.000
15780.000	*	*	*	*	74.000
21040.000	*	*	*	*	74.000
26300.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5280MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
				15	
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10560.000	11.763	40.025	51.788	-22.212	74.000
15840.000	*	*	*	*	74.000
21120.000	*	*	*	*	74.000
26400.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10560.000	11.763	40.025	51.788	-22.212	74.000
15840.000	*	*	*	*	74.000
21120.000	*	*	*	*	74.000
26400.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5300MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
				10	
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10600.000	13.182	39.806	52.988	-21.012	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10600.000	14.717	38.627	53.344	-20.656	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5320MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
				10	
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10640.000	12.912	38.028	50.940	-23.060	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10640.000	14.585	37.780	52.365	-21.635	74.000
15960.000	*	*	*	*	74.000
21280.000	*	*	*	*	74.000
26600.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5500MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11000.000	12.392	38.779	51.171	-22.829	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11000.000	14.514	38.424	52.938	-21.062	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5580MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11160.000	12.201	40.303	52.504	-21.496	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11160.000	14.445	39.469	53.914	-20.086	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5700MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBμV		dB	dBuV/m
	UD	ubμv	dBµV/m	UD	dBµV/m
Horizontal					
Peak Detector:					
11400.000	13.372	38.380	51.752	-22.248	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11400.000	14.922	38.849	53.771	-20.229	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

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Product	: VoIP Phone								
Test Item	: Harmonic Radiated Emission Data								
Test Site	: No.3 OATS								
Test Mode	: Mode 1: Transmit (802.11a-6Mbps) (5745MHz)								
Frequency	Correct	Reading	Measurement	Margin	Limit				
	Factor	Level	Level						
MHz	dB	dBuV	dBuV/m	dB	dBuV/m				
Horizontal									
Peak Detector:									
11490.000	15.842	27.271	43.112	-10.888	74.000				
17235.000	*	*	*	*	74.000				
20720.000	*	*	*	*	74.000				
25900.000	*	*	*	*	74.000				
31080.000	*	*	*	*	74.000				
36260.000	*	*	*	*	74.000				
Average									
Detector:									
*	*	*	*	*	*				
Vertical									
Peak Detector:									
11490.000	15.842	40.737	56.578	-17.422	74.000				
17235.000	*	*	*	*	74.000				
20720.000	*	*	*	*	74.000				
25900.000	*	*	*	*	74.000				
31080.000	*	*	*	*	74.000				
36260.000	*	*	*	*	74.000				
Average									
Detector:									
11490.000	15.842	27.271	43.112	-10.888	54.000				

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site Test Mode	 VoIP Phone Harmonic Radiated Emission Data No.3 OATS Mode 1: Transmit (802.11a-6Mbps) (5785MHz) 					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level	-		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
11490.000	15.842	40.737	56.578	-17.422	74.000	
17355.000	*	*	*	*	74.000	
20800.000	*	*	*	*	74.000	
26000.000	*	*	*	*	74.000	
31200.000	*	*	*	*	74.000	
36400.000	*	*	*	*	74.000	
Average						
Detector:						
11570.000	14.849	27.410	42.259	-11.741	54.000	
Vertical						
Peak Detector:						
11570.000	16.215	42.212	58.426	-15.574	74.000	
17355.000	*	*	*	*	74.000	
20800.000	*	*	*	*	74.000	
26000.000	*	*	*	*	74.000	
31200.000	*	*	*	*	74.000	
36400.000	*	*	*	*	74.000	
Average						
Detector:						
11570.000	16.215	28.012	44.226	-9.774	54.000	

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site Test Mode	 VoIP Phone Harmonic Radiated Emission Data No.3 OATS Mode 1: Transmit (802.11a-6Mbps) (5825MHz) 					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level	-		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
11650.000	13.179	42.219	55.398	-18.602	74.000	
17475.000	*	*	*	*	74.000	
20960.000	*	*	*	*	74.000	
26200.000	*	*	*	*	74.000	
31440000	*	*	*	*	74.000	
36680.000	*	*	*	*	74.000	
Average						
Detector:						
11650.000	13.179	27.663	40.842	-13.158	54.000	
Vertical						
Peak Detector:						
11650.000	14.634	41.364	55.998	-18.002	74.000	
17475.000	*	*	*	*	74.000	
20960.000	*	*	*	*	74.000	
26200.000	*	*	*	*	74.000	
31440000	*	*	*	*	74.000	
36680.000	*	*	*	*	74.000	
Average						
Detector:						
11650.000	14.634	27.495	42.129	-11.871	54.000	
NT /						

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5180MHz)

Level	Level		
dBµV	dBµV/m	dB	$dB\mu V/m$
39.661	50.593	-23.407	74.000
*	*	*	74.000
*	*	*	74.000
*	*	*	74.000
*	*	*	*
	* * *	* * * * * *	* * * * * * * * *

Vertical

Peak Detector:

10360.000	12.436	38.396	50.831	-23.169	74.000
15540.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5220MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit	
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m	
Horizontal						
Peak Detector:						
10440.000	9.725	39.686	49.411	-24.589	74.000	
15660.000	*	*	*	*	74.000	
20880.000	*	*	*	*	74.000	
26100.000	*	*	*	*	74.000	
Average						
Detector:						
*	*	*	*	*	*	

Vertical

Peak Detector:

10440.000	11.505	39.446	50.951	-23.049	74.000
15660.000	*	*	*	*	74.000
20880.000	*	*	*	*	74.000
26100.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5240MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10480.000	10.464	39.127	49.590	-24.410	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10480.000	12.399	38.930	51.329	-22.671	74.000
15720.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
Average					
Detector:					

Note:

*

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

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- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

*

4. Measurement Level = Reading Level + Correct Factor.

*

- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5260MHz)

MHz dB $dB\mu V$ $dB\mu V/m$ dB $dB\mu V/m$ HorizontalPeak Detector: 10520.000 11.531 39.408 50.939 -23.061 74.000 15780.000 ****74.000 21040.000 ****74.000 26300.000 ****74.000Average Detector: ****74.000 R *****Peak Detector: 10520.00011.531 39.408 50.939 -23.061 74.000 10520.00011.531 39.408 50.939 -23.061 74.000 15780.000***** 10520.000 11.531 39.408 50.939 -23.061 74.000 21040.000 *****74.000 21040.000 *****74.000 26300.000 *****74.000 26300.000 *****74.000	Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
Image: Second stateHorizontalPeak Detector: 10520.000 11.531 39.408 50.939 -23.061 74.000 15780.000 ****74.000 21040.000 ****74.000 26300.000 ****74.000Average Detector: *YerticalPeak Detector:10520.00011.531 39.408 50.939 -23.061 74.000 15780.000*****10520.00011.531 39.408 50.939 -23.061 74.000 21040.000****74.00026300.000****74.00026300.000****74.000						
Peak Detector: 10520.000 11.531 39.408 50.939 -23.061 74.000 15780.000 * * * * 74.000 21040.000 * * * * 74.000 26300.000 * * * * 74.000 26300.000 * * * * 74.000 Average * * * 74.000 Average * * * 74.000 * * * * * 74.000 Average * * * * 74.000 * * * * * * * Vertical * * * * * * 10520.000 11.531 39.408 50.939 -23.061 74.000 15780.000 * * * * 74.000 21040.000 * * * * 74.000 26300.000 * * * * 74.000<	MHz	dB	dBµV	dBµV/m	dB	dBµV/m
10520.00011.53139.40850.939-23.06174.00015780.000****74.00021040.000****74.00026300.000****74.000Average Detector: *****10520.000*****Petector: ******10520.00011.53139.40850.939-23.06174.00015780.000*****21040.000****74.00026300.000****74.00026300.000*****10520.000*****10520.00011.53139.40850.939-23.06174.00015780.000*****74.00026300.000*****74.000	Horizontal					
15780.000****74.00021040.000****74.00026300.000****74.000Average Detector: ****74.000VerticalPeak Detector:10520.00011.53139.40850.939-23.06174.00015780.000****74.00021040.000****74.00026300.000****74.00026300.000****74.000	Peak Detector:					
21040.000 * * * * 74.000 26300.000 * * * * 74.000 Average * * * * 74.000 Average * * * * 74.000 Average * * * * * Detector: * * * * * Vertical * * * * * Peak Detector: * * * * * 10520.000 11.531 39.408 50.939 -23.061 74.000 15780.000 * * * * 74.000 21040.000 * * * * 74.000 26300.000 * * * * 74.000	10520.000	11.531	39.408	50.939	-23.061	74.000
26300.000 * * * * 74.000 Average Detector: * * * 74.000 * * * * * 74.000 Vertical Peak Detector: * * * * * 10520.000 11.531 39.408 50.939 -23.061 74.000 15780.000 * * * * * 74.000 21040.000 * * * * * 74.000 26300.000 * * * * * 74.000	15780.000	*	*	*	*	74.000
Average Detector: * * * * * * * Vertical - - - * * * Peak Detector: - - - - - - 10520.000 11.531 39.408 50.939 -23.061 74.000 15780.000 * * * * 74.000 21040.000 * * * * 74.000 26300.000 * * * * 74.000	21040.000	*	*	*	*	74.000
Detector:***********VerticalPeak Detector:10520.00011.53139.40850.939-23.06174.00015780.000****74.00021040.000****74.00026300.000****74.000	26300.000	*	*	*	*	74.000
*****VerticalPeak Detector:10520.00011.53139.40850.939-23.06174.00015780.000****74.00021040.000****74.00026300.000****74.000	Average					
VerticalPeak Detector:10520.00011.53139.40850.939-23.06174.00015780.000****74.00021040.000****74.00026300.000****74.000	Detector:					
Peak Detector: 39.408 50.939 -23.061 74.000 10520.000 * * * * 74.000 15780.000 * * * * 74.000 21040.000 * * * * 74.000 26300.000 * * * * 74.000	*	*	*	*	*	*
10520.00011.53139.40850.939-23.06174.00015780.000*****74.00021040.000*****74.00026300.000*****74.000	Vertical					
15780.000****74.00021040.000****74.00026300.000****74.000	Peak Detector:					
21040.000 * * * * 74.000 26300.000 * * * * 74.000	10520.000	11.531	39.408	50.939	-23.061	74.000
26300.000 * * * * * 74.000	15780.000	*	*	*	*	74.000
20200000	21040.000	*	*	*	*	74.000
	26300.000	*	*	*	*	74.000
Average	Average					
Detector:	Detector:					
* * * * * *	*	*	*	*	*	*

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5280MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
10560.000	12.523	39.896	52.419	-21.581	74.000
15840.000	*	*	*	*	74.000
21120.000	*	*	*	*	74.000
26400.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10560.000	14.229	39.765	53.994	-20.006	74.000
15840.000	*	*	*	*	74.000
21120.000	*	*	*	*	74.000
26400.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
NT /					

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5300MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10600.000	13.182	38.632	51.814	-22.186	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Vertical

Peak Detector:

10600.000	14.717	38.232	52.949	-21.051	74.000
15900.000	*	*	*	*	74.000
21200.000	*	*	*	*	74.000
26500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	: VoIP Phone							
Test Item	: Harmonic Radiated Emission Data							
Test Site	: No.3 OATS							
Test Mode	: Mode 2:	: Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5320MHz)						
Frequency	Correct	Reading	Measurement	Margin	Limit			
	Factor	Level	Level					
MHz	dB	dBµV	dBµV/m	dB	dBµV/m			
Horizontal								
Peak Detector:								
10600.000	14.717	38.232	52.949	-21.051	74.000			
15960.000	*	*	*	*	74.000			
21280.000	*	*	*	*	74.000			
26600.000	*	*	*	*	74.000			
Average								
Detector:								
*	*	*	*	*	*			
Vertical								
Peak Detector:								
10640.000	14.585	37.497	52.082	-21.918	74.000			
15960.000	*	*	*	*	74.000			
21280.000	*	*	*	*	74.000			
26600.000	*	*	*	*	74.000			

Detector:					
*	*	*	*	*	*

Note:

Average

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5500MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11000.000	12.392	38.651	51.043	-22.957	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					

Peak Detector:

11000.000	12.392	38.651	51.043	-22.957	74.000
16500.000	*	*	*	*	74.000
22000.000	*	*	*	*	74.000
27500.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5580MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
	Tactor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11000.000	12.392	38.651	51.043	-22.957	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Vertical

Peak Detector:

11000.000	12.392	38.651	51.043	-22.957	74.000
16800.000	*	*	*	*	74.000
22400.000	*	*	*	*	74.000
28000.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5700MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11400.000	13.372	38.888	52.260	-21.740	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11400.000	14.922	38.952	53.874	-20.126	74.000
17100.000	*	*	*	*	74.000
22800.000	*	*	*	*	74.000
28500.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

0		-	
	116		V
Car			

-

Product Test Item	: VoIP Phone: Harmonic Radiated Emission Data				
Test Site	: Harmoni : No.3 OA		sion Data		
Test Mode			n-20BW 7.2Mbps) (5	5745MUz)	
Test Widde	. Widde 2.	11alisiliit (802.11	(11-20B W 7.2W0p8) ()/4JIVIIIZ)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11490.000	14.326	38.025	52.350	-21.650	74.000
17235.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11490.000	15.842	39.769	55.610	-18.390	74.000
17235.000	*	*	*	*	74.000
20720.000	*	*	*	*	74.000
25900.000	*	*	*	*	74.000
31080.000	*	*	*	*	74.000
36260.000	*	*	*	*	74.000
Average					
Detector:					
11490.000	15.842	24.461	40.302	-13.698	54.000

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

0		-	
	116		V
Car			

Product Test Item Test Site Test Mode	 VoIP Phone Harmonic Radiated Emission Data No.3 OATS Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5785MHz) 					
Frequency	Correct	Reading	Measurement	Margin	Limit	
	Factor	Level	Level			
MHz	dB	dBuV	dBuV/m	dB	dBuV/m	
Horizontal						
Peak Detector:						
11570.000	14.849	37.806	52.655	-21.345	74.000	
17355.000	*	*	*	*	74.000	
20880.000	*	*	*	*	74.000	
26100.000	*	*	*	*	74.000	
31320.000	*	*	*	*	74.000	
36540.000	*	*	*	*	74.000	
Average						
Detector:						
*	*	*	*	*	*	
Vertical						
Peak Detector:						
11570.000	16.215	39.354	55.568	-18.432	74.000	
17355.000	*	*	*	*	74.000	
20880.000	*	*	*	*	74.000	
26100.000	*	*	*	*	74.000	
31320.000	*	*	*	*	74.000	
36540.000	*	*	*	*	74.000	
Average						
Detector:						
11570.000	16.215	23.898	40.112	-13.888	54.000	

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site Test Mode	 VoIP Phone Harmonic Radiated Emission Data No.3 OATS Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5825MHz) 				
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11650.000	13.179	40.240	53.419	-20.581	74.000
17475.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
31440.000	*	*	*	*	74.000
36680.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11650.000	14.634	38.211	52.845	-21.155	74.000
17475.000	*	*	*	*	74.000
20960.000	*	*	*	*	74.000
26200.000	*	*	*	*	74.000
31440.000	*	*	*	*	74.000
36680.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Note:

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.

3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

4. Measurement Level = Reading Level + Correct Factor.

5. Correct Factor = Antenna factor + Cable loss – Amplifier gain.

6. The average measurement was not performed when the peak measured data under the limit of average detection.

7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5190MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
10380.000	10.400	38.633	49.033	-24.967	74.000
15570.000	*	*	*	*	74.000
20760.000	*	*	*	*	74.000
25950.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Vertical

Peak Detector:

10380.000	10.400	38.633	49.033	-24.967	74.000
15570.000	*	*	*	*	74.000
20760.000	*	*	*	*	74.000
25950.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5230MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10460.000	9.932	39.508	49.440	-24.560	74.000
15690.000	*	*	*	*	74.000
20920.000	*	*	*	*	74.000
26150.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10460.000	11.790	39.414	51.204	-22,796	74,000

10460.000	11.790	39.414	51.204	-22.796	74.000
15690.000	*	*	*	*	74.000
20920.000	*	*	*	*	74.000
26150.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5270MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
10540.000	12.058	38.945	51.004	-22.996	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					

Peak Detector:

tak Dettetor.					
10540.000	13.868	38.962	52.830	-21.170	74.000
15810.000	*	*	*	*	74.000
21080.000	*	*	*	*	74.000
26350.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5310MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	$dB\mu V/m$
Horizontal					
Peak Detector:					
10620.000	13.096	38.328	51.423	-22.577	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
10620.000	14.683	37.984	52.667	-21.333	74.000
15930.000	*	*	*	*	74.000

15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5510MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector:					
11020.000	12.632	38.810	51.442	-22.558	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Vertical

Peak Detector:

11020.000	14.778	38.588	53.366	-20.634	74.000
15930.000	*	*	*	*	74.000
21240.000	*	*	*	*	74.000
26550.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5550MHz)

Frequency	Correct Factor	Reading Level	Measurement Level	Margin	Limit
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11110.000	12.270	38.927	51.197	-22.803	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					

Peak Detector:

11100.000	14.559	38.794	53.353	-20.647	74.000
16770.000	*	*	*	*	74.000
22360.000	*	*	*	*	74.000
27950.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product	:	VoIP Phone
Test Item	:	Harmonic Radiated Emission Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5670MHz)

Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector:					
11340.000	12.852	38.047	50.898	-23.102	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11340.000	14 594	37 985	52 579	-21 421	74 000

11340.000	14.594	37.985	52.579	-21.421	74.000
17010.000	*	*	*	*	74.000
22680.000	*	*	*	*	74.000
28350.000	*	*	*	*	74.000
Average Detector:					
*	*	*	*	*	*

Note:

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Quielek	0		-	
QUICICK		110		NC
	Car		510	

Product Test Item Test Site Test Mode	: No.3 OA	ic Radiated Emis ATS	sion Data 1n-40BW 15Mbps) (5	755MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11510.000	14.402	37.460	51.862	-22.138	74.000
17265.000	*	*	*	*	74.000
20760.000	*	*	*	*	74.000
25950.000	*	*	*	*	74.000
31140.000	*	*	*	*	74.000
36330.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11510.000	15.894	38.171	54.065	-19.935	74.000
17265.000	*	*	*	*	74.000
20760.000	*	*	*	*	74.000
25950.000	*	*	*	*	74.000
31140.000	*	*	*	*	74.000
36330.000	*	*	*	*	74.000
Average					
Detector:					
11510.000	15.894	24.373	40.267	-13.733	54.000
Note					

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Quielek	0		-	
QUICICK		110		NC
	Car		510	

Product Test Item Test Site Test Mode	: No.3 O	ic Radiated Emis ATS	sion Data 1n-40BW 15Mbps) (5	795MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level	-	
MHz	dB	dBuV	dBuV/m	dB	dBuV/m
Horizontal					
Peak Detector:					
11590.000	15.138	37.719	52.857	-21.143	74.000
17385.000	*	*	*	*	74.000
20920.000	*	*	*	*	74.000
26150.000	*	*	*	*	74.000
31380.000	*	*	*	*	74.000
36610.000	*	*	*	*	74.000
Average					
Detector:					
*	*	*	*	*	*
Vertical					
Peak Detector:					
11590.000	16.461	38.345	54.806	-19.194	74.000
17385.000	*	*	*	*	74.000
20920.000	*	*	*	*	74.000
26150.000	*	*	*	*	74.000
31380.000	*	*	*	*	74.000
36610.000	*	*	*	*	74.000
Average					
Detector:					
11590.000	16.461	24.006	40.467	-13.533	54.000
Note:					

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

7. The emission levels of other frequencies are very lower than the limit and not show in test report.

Product Test Item Test Site Test Mode	: No.3 OA	Radiated Emissio	n a-6Mbps) (5220MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
153.190	-7.964	45.049	37.085	-6.415	43.500
333.610	-3.693	44.751	41.058	-4.942	46.000
500.450	2.035	38.236	40.271	-5.729	46.000
624.610	1.507	36.585	38.092	-7.908	46.000
718.700	3.818	34.989	38.807	-7.193	46.000
911.730	6.471	32.619	39.090	-6.910	46.000
Vertical					
Peak Detector					
194.900	-5.673	43.052	37.379	-6.121	43.500
262.800	-4.944	44.343	39.399	-6.601	46.000
384.050	-0.122	38.562	38.440	-7.560	46.000
523.730	1.128	36.407	37.535	-8.465	46.000
711.910	-1.132	35.788	34.656	-11.344	46.000
968.960	3.936	30.521	34.457	-19.543	54.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Product Test Item Test Site Test Mode	: No.3 O	Radiated Emissio			
Test Mode	: Mode 1	: Transmit (802.11	a-6Mbps) (5300MHz	2)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
210.420	-10.427	47.519	37.092	-6.408	43.500
397.630	0.826	36.030	36.856	-9.144	46.000
500.450	2.035	37.821	39.856	-6.144	46.000
624.610	1.507	36.068	37.575	-8.425	46.000
737.130	3.138	34.984	38.122	-7.878	46.000
911.730	6.471	32.773	39.244	-6.756	46.000
Vertical					
Peak Detector					
203.630	-5.517	41.708	36.190	-7.310	43.500
375.320	0.388	38.343	38.731	-7.269	46.000
500.450	-0.115	34.544	34.429	-11.571	46.000
602.300	1.704	33.479	35.183	-10.817	46.000
711.910	-1.132	35.382	34.250	-11.750	46.000
960.230	3.189	28.353	31.542	-22.458	54.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	: No.3 OA	Radiated Emissio	n a-6Mbps) (5580MHz	:)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
154.160	-8.002	45.450	37.448	-6.052	43.500
331.670	-4.089	42.534	38.445	-7.555	46.000
500.450	2.035	38.131	40.166	-5.834	46.000
624.610	1.507	36.285	37.792	-8.208	46.000
792.420	6.391	35.226	41.617	-4.383	46.000
911.730	6.471	33.162	39.633	-6.367	46.000
Vertical					
Peak Detector					
191.020	-5.629	43.396	37.767	-5.733	43.500
384.050	-0.122	38.740	38.618	-7.382	46.000
527.610	1.153	35.637	36.790	-9.210	46.000
601.330	1.463	34.412	35.875	-10.125	46.000
778.840	2.580	28.855	31.435	-14.565	46.000

960.230

1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.

32.230

-21.770

54.000

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.

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4. Measurement Level = Reading Level + Correct Factor.

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- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	: No.3 O	Radiated Emissio	n n-20BW 7.2Mbps) (5	5785MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector					
206.540	-11.155	50.038	38.883	-4.617	43.500
301.600	-3.375	45.109	41.735	-4.265	46.000
431.580	-2.099	42.897	40.798	-5.202	46.000
551.860	2.714	36.730	39.444	-6.556	46.000
730.340	3.395	36.681	40.076	-5.924	46.000
912.700	6.132	31.620	37.752	-8.248	46.000
Vertical					
Peak Detector					
59.100	-4.097	38.384	34.287	-5.713	40.000
204.600	-7.666	45.561	37.894	-5.606	43.500
355.920	-3.488	42.184	38.696	-7.304	46.000
499.480	-0.852	36.582	35.730	-10.270	46.000
714.820	-0.948	37.881	36.933	-9.067	46.000
912.700	1.762	32.883	34.645	-11.355	46.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site	: No.3 OA	Radiated Emissio			
Test Mode	: Mode 2:	Transmit (802.11	n-20BW 7.2Mbps) (5	5220MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
213.330	-10.351	46.463	36.112	-7.388	43.500
397.630	0.826	37.476	38.302	-7.698	46.000
500.450	2.035	37.731	39.766	-6.234	46.000
624.610	1.507	36.203	37.710	-8.290	46.000
726.460	3.832	35.030	38.862	-7.138	46.000
911.730	6.471	32.184	38.655	-7.345	46.000
Vertical					
Peak Detector					
199.750	-5.717	42.953	37.236	-6.264	43.500
384.050	-0.122	38.334	38.212	-7.788	46.000
528.580	1.164	32.364	33.528	-12.472	46.000
601.330	1.463	34.255	35.718	-10.282	46.000
749.740	2.023	31.869	33.892	-12.108	46.000
960.230	3.189	29.544	32.733	-21.267	54.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	: No.3 O	Radiated Emissio ATS	n n-20BW 7.2Mbps) (5	200MHz)	
Test Mode	. Wrote 2	. 11ansinit (802.11	II-20 B w 7.2wops) ()500IVIIIIZ)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
188.110	-10.623	48.136	37.513	-5.987	43.500
335.550	-3.432	52.428	48.996	2.996	46.000
500.450	2.035	38.230	40.265	-5.735	46.000
624.610	1.507	36.232	37.739	-8.261	46.000
795.330	6.388	30.715	37.103	-8.897	46.000
911.730	6.471	32.812	39.283	-6.717	46.000
Vertical					
Peak Detector					
135.960	-4.344	40.997	36.653	-6.847	43.500
240.490	-6.032	42.544	36.511	-9.489	46.000
398.600	-2.371	39.196	36.825	-9.175	46.000
537.310	1.803	38.530	40.333	-5.667	46.000
686.690	2.277	31.933	34.210	-11.790	46.000
911.730	0.241	34.151	34.392	-11.608	46.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Product	: VoIP Phe	one			
Test Item	: General	Radiated Emissio	n		
Test Site	: No.3 OA	ATS			
Test Mode	: Mode 2:	Transmit (802.11	n-20BW 7.2Mbps) (5	5580MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector					
150.280	-7.870	44.315	36.445	-7.055	43.500
208.480	-10.485	46.739	36.253	-7.247	43.500
342.340	-2.566	41.898	39.332	-6.668	46.000
500.450	2.035	37.783	39.818	-6.182	46.000
725.490	3.838	35.273	39.110	-6.890	46.000
911.730	6.471	32.369	38.840	-7.160	46.000
Vertical					
Peak Detector					
195.870	-5.682	42.456	36.774	-6.726	43.500
375.320	0.388	39.035	39.423	-6.577	46.000
527.610	1.153	35.801	36.954	-9.046	46.000
678.930	1.032	37.504	38.536	-7.464	46.000
779.810	2.745	30.201	32.946	-13.054	46.000
960.230	3.189	29.744	32.933	-21.067	54.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site Test Mode	: No.3 OA	Radiated Emissio ATS	n n-20BW 7.2Mbps) (5	5785MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector					
47.460	-9.151	42.226	33.076	-6.924	40.000
206.540	-11.155	49.589	38.434	-5.066	43.500
431.580	-2.099	42.848	40.749	-5.251	46.000
625.580	1.770	34.966	36.736	-9.264	46.000
747.800	3.296	34.596	37.892	-8.108	46.000
912.700	6.132	31.867	37.999	-8.001	46.000
Vertical					
Peak Detector					
206.540	-7.705	46.535	38.830	-4.670	43.500
336.520	-4.630	45.658	41.028	-4.972	46.000
528.580	-0.462	35.708	35.246	-10.754	46.000
664.380	-1.918	33.056	31.138	-14.862	46.000
776.900	2.373	31.001	33.374	-12.626	46.000
904.280	2.728	33.117	35.846	-10.154	46.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Product Test Item Test Site Test Mode	: No.3 OA	Radiated Emissio ATS	n n-40BW 15Mbps) (5	230MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
154.160	-8.002	45.628	37.626	-5.874	43.500
212.360	-10.382	47.086	36.704	-6.796	43.500
375.320	0.918	40.121	41.039	-4.961	46.000
624.610	1.507	36.060	37.567	-8.433	46.000
748.770	3.919	35.687	39.606	-6.394	46.000
911.730	6.471	32.271	38.742	-7.258	46.000
Vertical					
Peak Detector					
191.990	-5.637	42.531	36.894	-6.606	43.500
343.310	-0.765	38.263	37.498	-8.502	46.000
527.610	1.153	35.594	36.747	-9.253	46.000
601.330	1.463	34.008	35.471	-10.529	46.000
778.840	2.580	29.384	31.964	-14.036	46.000
911.730	0.241	33.984	34.225	-11.775	46.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

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Product Test Item Test Site Test Mode	: No.3 O	Radiated Emissio	n n-40BW 15Mbps) (5	310MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
206.540	-10.529	47.540	37.011	-6.489	43.500
339.430	-3.358	43.130	39.772	-6.228	46.000
500.450	2.035	37.716	39.751	-6.249	46.000
624.610	1.507	35.583	37.090	-8.910	46.000
749.740	3.963	35.131	39.094	-6.906	46.000
911.730	6.471	32.253	38.724	-7.276	46.000
Vertical					
Peak Detector					
191.990	-5.637	43.585	37.948	-5.552	43.500
337.490	-1.825	43.383 39.100	37.948	-3.332	45.500
451.950	-5.241	38.461	33.220	-12.780	46.000
431.930 527.610	-3.241	35.922	37.075	-12.780	46.000
702.210	-0.587	35.830	35.243	-10.757	46.000
911.730	0.241	34.264	34.505	-11.495	46.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product Test Item Test Site	: VoIP Pho: General I: No.3 OA	Radiated Emissio	n		
Test Mode	: Mode 3:	Transmit (802.11	n-40BW 15Mbps) (5	550MHz)	
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	$dB\mu V/m$	dB	dBµV/m
Horizontal					
Peak Detector					
208.480	-10.485	48.008	37.522	-5.978	43.500
384.050	1.268	39.898	41.166	-4.834	46.000
500.450	2.035	37.599	39.634	-6.366	46.000
624.610	1.507	35.781	37.288	-8.712	46.000
733.250	3.341	34.775	38.116	-7.884	46.000
911.730	6.471	32.520	38.991	-7.009	46.000
Vertical					
Peak Detector					
194.900	-5.673	44.055	38.382	-5.118	43.500
375.320	0.388	40.361	40.749	-5.251	46.000
528.580	1.164	33.080	34.244	-11.756	46.000
711.910	-1.132	35.409	34.277	-11.723	46.000
864.200	-0.291	30.689	30.398	-15.602	46.000
911.730	0.241	33.981	34.222	-11.778	46.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

Product	: VoIP Phone				
Test Item	: General Radiated Emission				
Test Site	: No.3 OATS				
Test Mode	: Mode 3: Transmit (802.11n-40BW 15Mbps) (5755MHz)				
Frequency	Correct	Reading	Measurement	Margin	Limit
	Factor	Level	Level		
MHz	dB	dBµV	dBµV/m	dB	dBµV/m
Horizontal					
Peak Detector					
208.480	-11.062	49.403	38.340	-5.160	43.500
336.520	-3.860	45.433	41.573	-4.427	46.000
499.480	0.048	37.854	37.902	-8.098	46.000
625.580	1.770	34.393	36.163	-9.837	46.000
732.280	3.082	36.034	39.116	-6.884	46.000
868.240	5.386	32.470	37.856	-8.144	46.000
Vertical					
Peak Detector					
204.600	-7.666	46.187	38.520	-4.980	43.500
355.920	-3.488	41.717	38.229	-7.771	46.000
499.480	-0.852	35.925	35.073	-10.927	46.000
666.320	-1.809	35.591	33.783	-12.217	46.000
780.780	3.060	31.741	34.801	-11.199	46.000
961.200	7.260	27.596	34.856	-19.144	54.000

- 1. All Readings below 1GHz are Quasi-Peak, above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. Measurement Level = Reading Level + Correct Factor.
- 5. Correct Factor = Antenna factor + Cable loss Amplifier gain.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.
- 7. The emission levels of other frequencies are very lower than the limit and not show in test report.
- 8. No emission found between lowest internal used/generated frequency to 30MHz.

6. Band Edge

6.1. Test Equipment

RF Radiated Measurement:

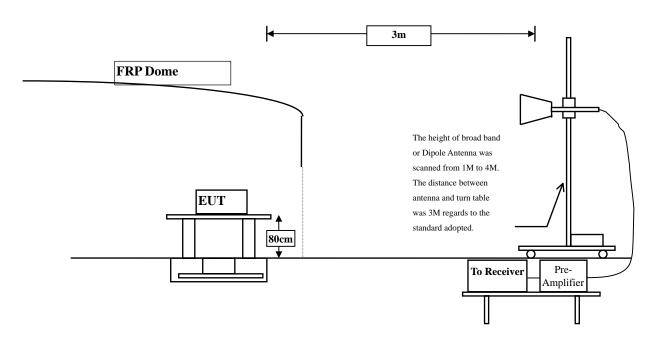
The following test equipments are used during the band edge tests:

Test Site	Equipment		Manufacturer	Model No./Serial No.	Last Cal.
Site # 3	Bilog Antenna		Schaffner Chase	CBL6112B/2673	Sep., 2014
	Х	Horn Antenna	Schwarzbeck	BBHA9120D/D305	Sep., 2014
		Horn Antenna	Schwarzbeck	BBHA9170/208	Jul., 2014
		Pre-Amplifier	QTK	QTK-AMP-03 / 0003	May, 2014
	Х	Pre-Amplifier	QTK	AP-180C / CHM_0906076	Sep., 2014
		Pre-Amplifier	MITEQ	AMF-4D-180400-45-6P/ 925975	Mar., 2014
	Х	Spectrum Analyzer	Agilent	E4407B / US39440758	May, 2014
		Test Receiver	R & S	ESCS 30/ 825442/018	Sep., 2014
	Х	Coaxial Cable	QuieTek	QTK-CABLE/ CAB5	Feb., 2014
	Х	Controller	QuieTek	QTK-CONTROLLER/ CTRL3	N/A
	Х	Coaxial Switch	Anritsu	MP59B/6200265729	N/A

Note: 1. All instruments are calibrated every one year.

2. The test instruments marked by "X" are used to measure the final test results.

6.2. Test Setup



6.3. Limits

Inside of the restricted band:

The provisions of Section 15.205 of this part apply to intentional radiators operating under this section.

Radiated emissions which fall in the restricted bands, as defined in Section 15.205, must also comply with the radiated emission limits specified in Section 15.209:

FCC Part 15 Subpart C Paragraph 15.209 Limits				
Frequency MHz	uV/m @3m	dBµV/m@3m		
30-88	100	40		
88-216	150	43.5		
216-960	200	46		
Above 960	500	54		

Remarks : 1. RF Voltage $(dB\mu V) = 20 \log RF$ Voltage (uV)

2. In the Above Table, the tighter limit applies at the band edges.

3. Distance refers to the distance in meters between the measuring instrument

antenna and the closed point of any part of the device or system.

Outside of the restricted band:

5 .15GHz - 5.35 GHz	< -27 dBm/MHz EIRP,
5.47GHz - 5.725 GHz	< -27 dBm/MHz EIRP,
5.725GHz - 5.825 GHz	< -27 dBm/MHz EIRP,
	< 17 dBm/MHz EIPP (All)

<-17 dBm/MHz EIRP (All emission within the frequency range from the band edge to 10 MHz above or below the band edge).

6.4. Test Procedure

The EUT and its simulators are placed on a turn table which is 0.8 meter above ground. The turn table can rotate 360 degrees to determine the position of the maximum emission level. The EUT was positioned such that the distance from antenna to the EUT was 3 meters.

The antenna can move up and down between 1 meter and 4 meters to find out the maximum emission level.

Both horizontal and vertical polarization of the antenna are set on measurement. In order to find the maximum emission, all of the interface cables must be manipulated according to ANSI C63.10:2009 on radiated measurement.

The bandwidth below 1GHz setting on the field strength meter is 120 kHz, above 1GHz are 1 MHz. The EUT was setup to ANSI C63.10, 2009; tested to DTS test procedure of FCC KDB-789033 for compliance to FCC 47CFR Subpart E requirements.

Band edge measurement, when testing restrictions band, using the limit value 74/54 dBuV, if testing non-restrictions band, using the limit value -27dBm, "dBm" obtained as follows: In emission tests the measurement antenna is used to detect the field from the UUT in one stage of the measurement and from the substitution antenna in the other stage, the substitution antenna shall be used to replace the equipment under test in substitution measurements, using the above method to obtain the EIRP.

6.5. Uncertainty

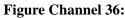
- \pm 3.8 dB below 1GHz
- \pm 3.9 dB above 1GHz

6.6. Test Result of Band Edge

Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)-Channel 36

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
36 (Peak)	5149.000	3.344	61.915	65.259	74.00	54.00	Pass
36 (Peak)	5150.000	3.340	61.578	64.918	74.00	54.00	Pass
36 (Peak)	5174.000	3.256	101.013	104.269			
36 (Average)	5150.000	3.340	45.237	48.577	74.00	54.00	Pass
36 (Average)	5187.400	3.208	90.489	93.697			



Horizontal (Peak)



Figure Channel 36:

Horizontal (Average)



Note:1. All readings above 1GHz are performed with peak and/or average measurements as necessary.

- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)-Channel 36

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel NO.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
36 (Peak)	5149.600	5.259	60.509	65.768	74.00	54.00	Pass
36 (Peak)	5150.000	5.260	58.114	63.374	74.00	54.00	Pass
36 (Peak)	5184.800	5.355	99.239	104.594			
36 (Average)	5150.000	5.260	41.820	47.080	74.00	54.00	Pass
36 (Average)	5187.400	5.362	88.271	93.633			

Figure Channel 36:

Vertical (Peak)

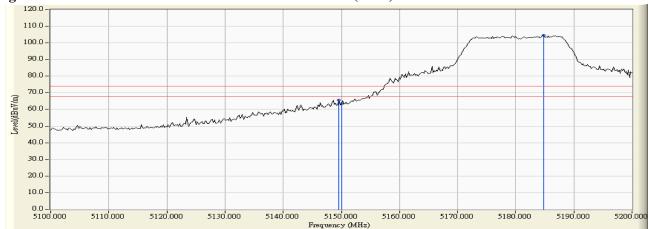


Figure Channel 36:

Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

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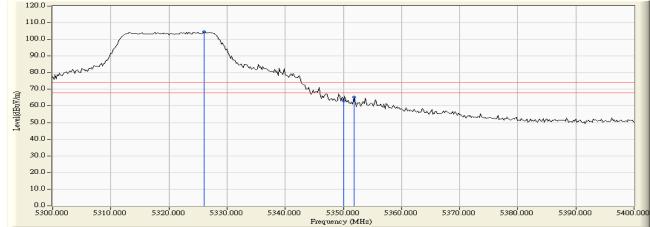
Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 64

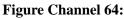
RF Radiated Measurement (Horizontal):

Channel No.	· ·		Ç	Emission Level		•	Result
Chamler 100.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	(dBµV/m)	$(dB\mu V/m)$	Result
64 (Peak)	5326.000	3.793	100.804	104.597			
64 (Peak)	5350.000	3.716	59.252	62.969	74.00	54.00	Pass
64 (Peak)	5351.800	3.710	61.715	65.426	74.00	54.00	Pass
64 (Average)	5327.400	3.789	90.334	94.123			
64 (Average)	5350.000	3.716	43.554	47.271	74.00	54.00	Pass

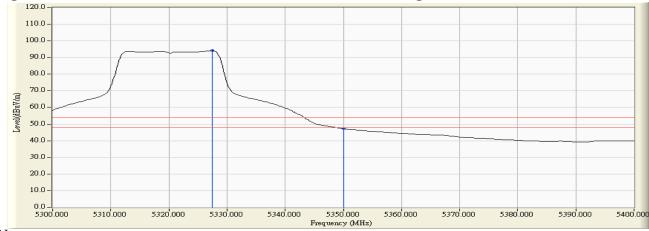
Figure Channel 64:

Horizontal (Peak)





Horizontal (Average)



- All readings above 1GHz are performed with peak and/or average measurements as necessary. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto. 1.
- 2. 3. 4. Average measurements: RBW = 1MHz, VBW = 5 MHZ, Sweep: Auto. "*", means this data is the worst emission level
- ', means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- The average measurement was not performed when the peak measured data under the limit of average 6. detection.

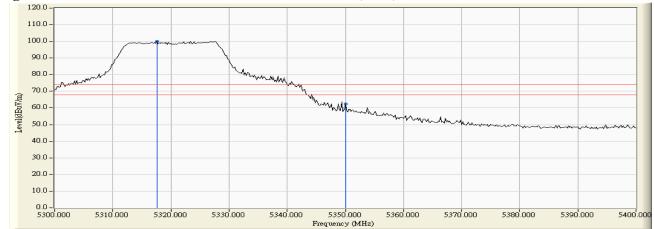
Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 64

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
64 (Peak)	5317.600	5.732	94.343	100.075			
64 (Peak)	5350.000	5.691	56.752	62.444	74.00	54.00	Pass
64 (Average)	5327.400	5.720	84.068	89.788			
64 (Average)	5350.000	5.691	37.955	43.647	74.00	54.00	Pass

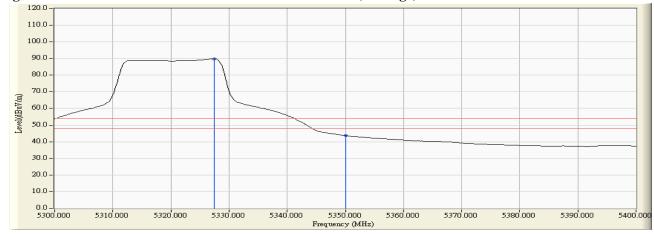
Figure Channel 64:

Vertical (Peak)





Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 100

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesuit
100 (Peak)	5458.800	4.337	56.205	60.543	74.00	54.00	Pass
100 (Peak)	5460.000	4.354	54.539	58.893	74.00	54.00	Pass
100 (Peak)	5500.400	4.817	102.258	107.075			
100 (Average)	5460.000	4.354	40.097	44.451	74.00	54.00	Pass
100 (Average)	5507.400	4.830	90.361	95.191			

Figure Channel 100:

Horizontal (Peak)

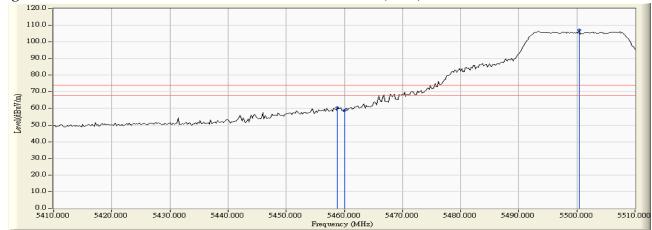
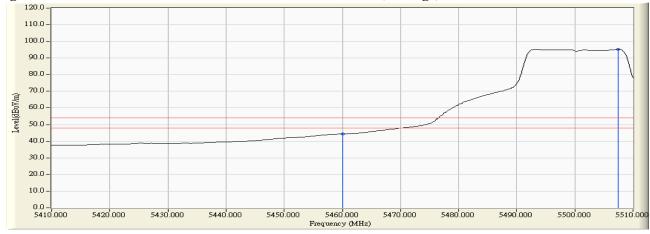


Figure Channel 100:

Horizontal (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: $RBW = \hat{1}MHz$, $VBW = \hat{3}MHz$, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

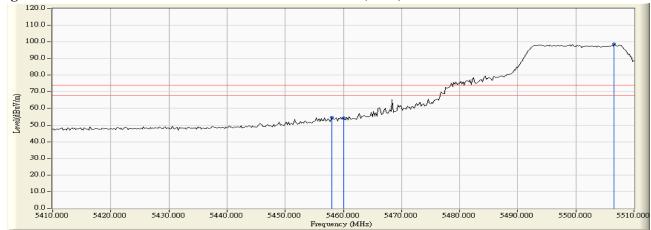
Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 100

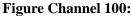
RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel NO.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
100 (Peak)	5458.000	6.027	48.732	54.759	74.00	54.00	Pass
100 (Peak)	5460.000	6.041	48.303	54.344	74.00	54.00	Pass
100 (Peak)	5506.600	6.280	92.475	98.755			
100 (Average)	5460.000	6.041	34.115	40.156	74.00	54.00	Pass
100 (Average)	5493.200	6.255	81.445	87.699			

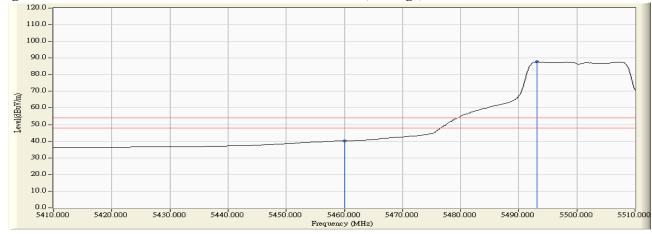
Figure Channel 100:

Vertical (Peak)





Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 100

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5500.000	13.834	-68.030	-54.196	-27.196	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5500.000	14.308	-73.060	-58.752	-31.752	-27.000	Pass

Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) -Channel 140

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	12.135	-60.750	-48.615	-21.615	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5725.000	13.280	-71.030	-57.750	-30.750	-27.000	Pass

Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)-Channel 149

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5715.000	12.198	-69.010	-56.812	-29.812	-27.000	Pass
Horizontal	5725.000	12.135	-60.620	-48.485	-31.485	-17.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5715.000	12.302	-73.840	-61.538	-34.538	-27.000	Pass
Vertical	5725.000	12.243	-66.880	-54.637	-37.637	-17.000	Pass

Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps)-Channel 165

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5850.000	12.835	-66.390	-53.555	-36.555	-17.000	Pass
Horizontal	5860.000	12.994	-67.960	-54.966	-27.966	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5850.000	12.770	-70.450	-57.680	-40.680	-17.000	Pass
Vertical	5860.000	12.964	-72.930	-59.966	-32.966	-27.000	Pass

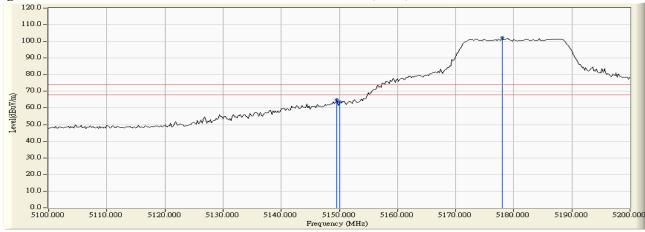
Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 36

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
36 (Peak)	5149.600	3.342	61.608	64.950	74.00	54.00	Pass
36 (Peak)	5150.000	3.340	60.331	63.671	74.00	54.00	Pass
36 (Peak)	5178.000	3.240	99.032	102.273			
36 (Average)	5150.000	3.340	41.918	45.258	74.00	54.00	Pass
36 (Average)	5187.600	3.207	87.291	90.498			

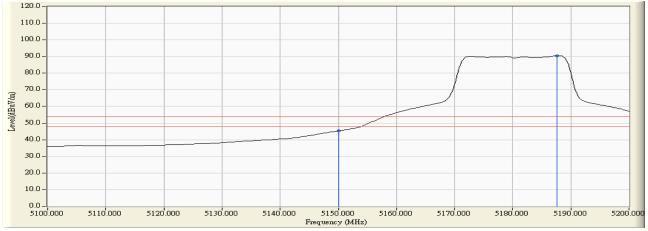
Figure Channel 36:

Horizontal (Peak)





Horizontal (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

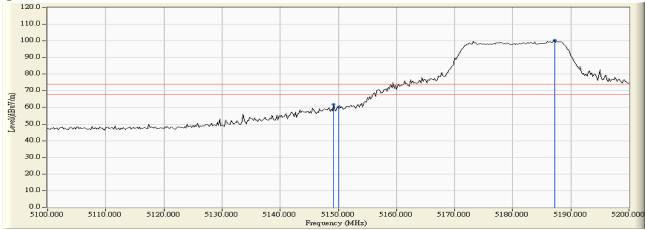
Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 36

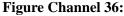
RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
36 (Peak)	5149.200	5.258	56.540	61.798	74.00	54.00	Pass
36 (Peak)	5150.000	5.260	54.922	60.182	74.00	54.00	Pass
36 (Peak)	5187.200	5.361	94.855	100.217			
36 (Average)	5150.000	5.260	38.433	43.693	74.00	54.00	Pass
36 (Average)	5188.000	5.363	84.004	89.367			

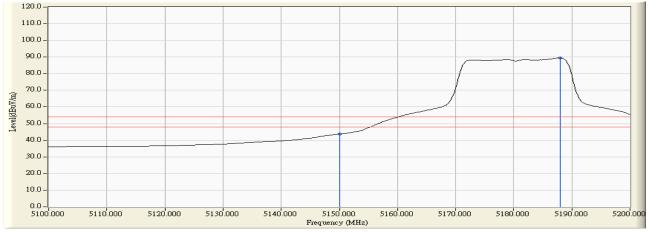
Figure Channel 36:

Vertical (Peak)





Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

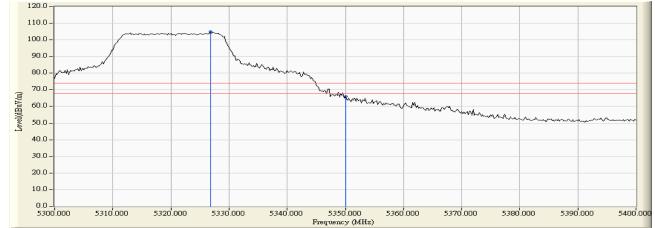
Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 64

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
64 (Peak)	5326.800	3.791	101.018	104.809			
64 (Peak)	5350.000	3.716	62.077	65.794	74.00	54.00	Pass
64 (Average)	5327.800	3.788	89.880	93.668			
64 (Average)	5350.000	3.716	43.764	47.481	74.00	54.00	Pass

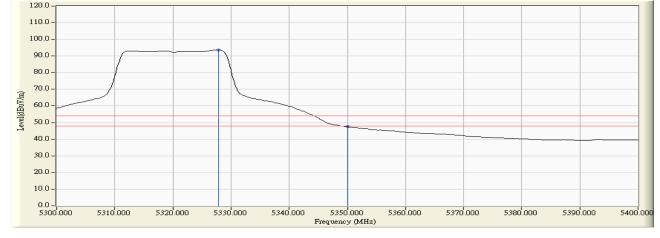
Figure Channel 64:

Horizontal (Peak)





Horizontal (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

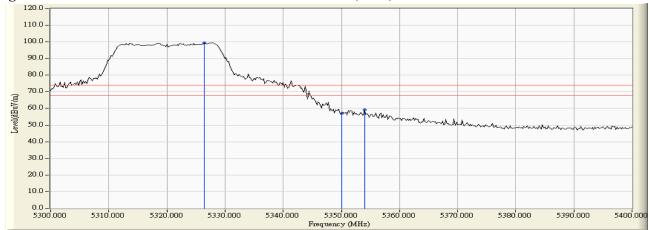
Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 64

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesult
64 (Peak)	5326.400	5.721	93.694	99.415			
64 (Peak)	5350.000	5.691	51.204	56.896	74.00	54.00	Pass
64 (Peak)	5354.000	5.686	53.654	59.340	74.00	54.00	Pass
64 (Average)	5327.600	5.720	83.627	89.347			
64 (Average)	5350.000	5.691	37.966	43.658	74.00	54.00	Pass

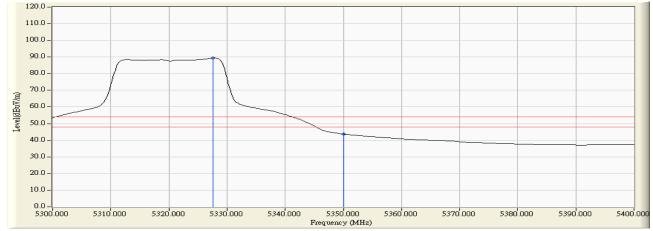
Figure Channel 64:

Vertical (Peak)





Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

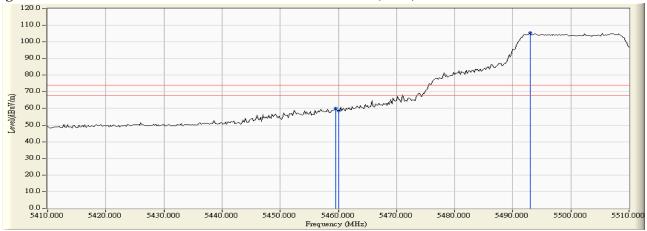
Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 100

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesuit
100 (Peak)	5459.600	4.349	55.713	60.062	74.00	54.00	Pass
100 (Peak)	5460.000	4.354	54.215	58.569	74.00	54.00	Pass
100 (Peak)	5493.000	4.766	100.668	105.434			
100 (Average)	5460.000	4.354	39.168	43.522	74.00	54.00	Pass
100 (Average)	5507.800	4.826	89.309	94.136			

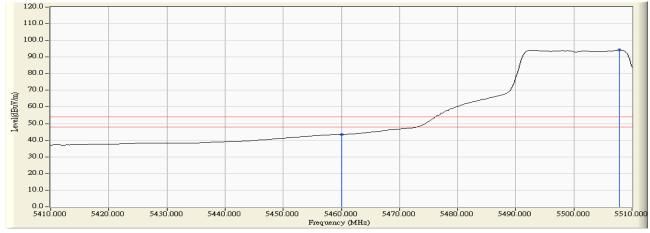
Figure Channel 100:

Horizontal (Peak)





Horizontal (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 100

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
100 (Peak)	5460.000	6.041	48.019	54.060	74.00	54.00	Pass
100 (Peak)	5507.400	6.275	90.857	97.132			
100 (Average)	5460.000	6.041	33.522	39.563	74.00	54.00	Pass
100 (Average)	5508.000	6.270	80.376	86.647			

Figure Channel 100:

Vertical (Peak)

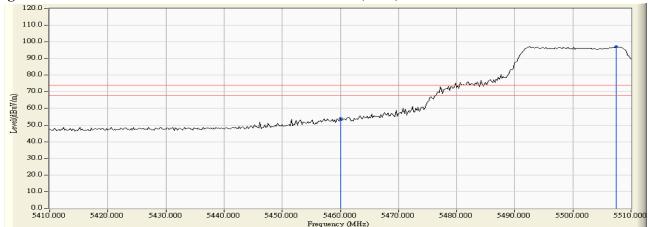


Figure Channel 100:

Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 100

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	13.958	-68.610	-54.652	-27.652	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5470.000	14.324	-73.100	-58.776	-31.776	-27.000	Pass

Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 140

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5745.000	12.009	-71.460	-59.451	-32.451	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5745.000	12.124	-74.920	-62.796	-35.796	-27.000	Pass



Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 149

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5715.000	12.198	-68.610	-56.412	-29.412	-27.000	Pass
Horizontal	5725.000	12.135	-61.640	-49.505	-32.505	-17.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5715.000	12.302	-73.720	-61.418	-34.418	-27.000	Pass
Vertical	5725.000	12.243	-66.520	-54.277	-37.277	-17.000	Pass

Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) -Channel 165

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5850.000	12.835	-68.150	-55.315	-38.315	-17.000	Pass
Horizontal	5860.000	12.994	-69.660	-56.666	-29.666	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5850.000	12.770	-71.680	-58.910	-41.910	-17.000	Pass
Vertical	5860.000	12.964	-73.940	-60.976	-33.976	-27.000	Pass

Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 38

RF Radiated Measurement (Horizontal):

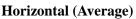
Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesult
38 (Peak)	5150.000	3.340	68.475	71.815	74.00	54.00	Pass
38 (Peak)	5197.200	3.164	95.717	98.881			
38 (Average)	5150.000	3.340	49.526	52.866	74.00	54.00	Pass
38 (Average)	5199.200	3.157	83.467	86.625			

Figure Channel 38:

Horizontal (Peak)









- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

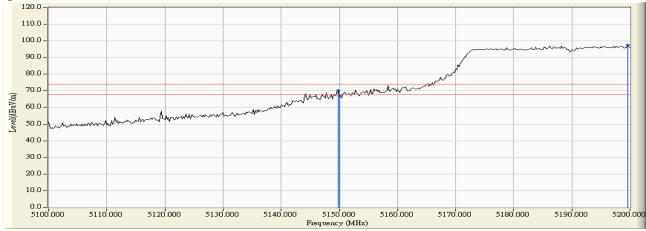
Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 38

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Average Limit	Result
	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
38 (Peak)	5149.800	5.260	64.992	70.251	74.00	54.00	Pass
38 (Peak)	5150.000	5.260	61.879	67.139	74.00	54.00	Pass
38 (Peak)	5199.600	5.387	92.109	97.495			
38 (Average)	5150.000	5.260	45.847	51.107	74.00	54.00	Pass
38 (Average)	5195.200	5.375	80.294	85.670			

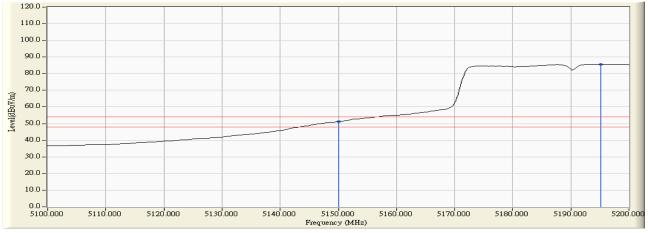
Figure Channel 38:

Vertical (Peak)





Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

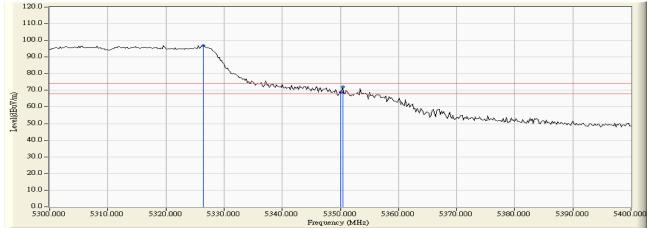
Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 62

RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
62 (Peak)	5326.400	3.792	93.194	96.986			
62 (Peak)	5350.000	3.716	64.980	68.697	74.00	54.00	Pass
62 (Peak)	5350.400	3.714	68.273	71.988	74.00	54.00	Pass
62 (Average)	5307.600	3.853	81.182	85.034			
62 (Average)	5350.000	3.716	46.855	50.572	74.00	54.00	Pass

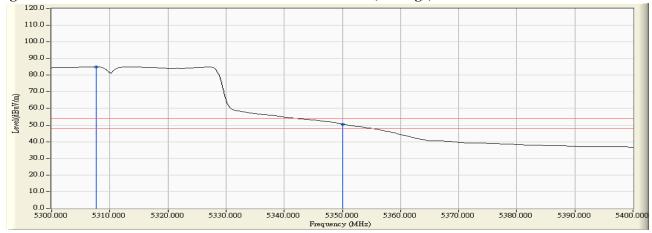
Figure Channel 62:

Horizontal (Peak)





Horizontal (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

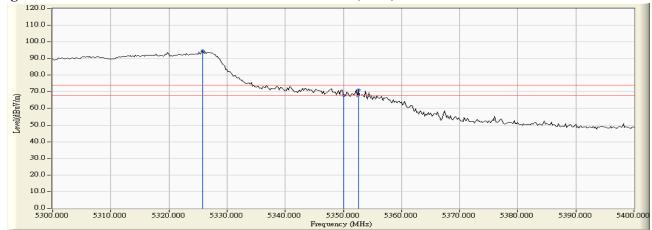
Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 62

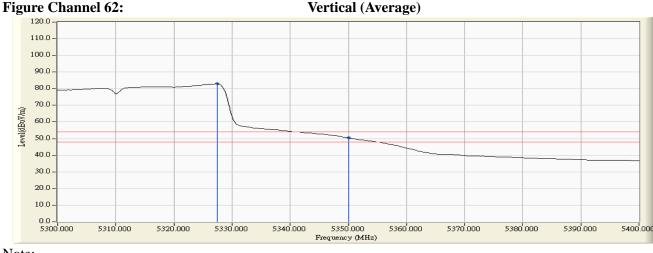
RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel NO.	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Result
62 (Peak)	5325.800	5.722	88.878	94.600			
62 (Peak)	5350.000	5.691	62.220	67.912	74.00	54.00	Pass
62 (Peak)	5352.600	5.688	65.309	70.997	74.00	54.00	Pass
62 (Average)	5327.400	5.720	77.126	82.846			
62 (Average)	5350.000	5.691	44.713	50.405	74.00	54.00	Pass

Figure Channel 62:

Vertical (Peak)





- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

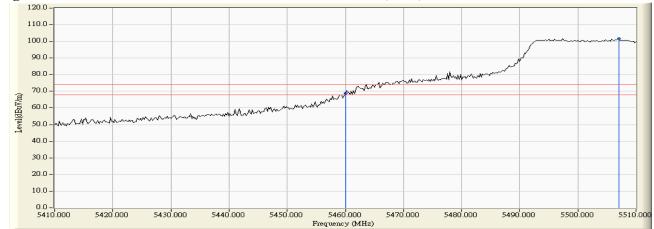
Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 102

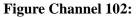
RF Radiated Measurement (Horizontal):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
	(MHz)	(dB)	(dBµV)	$(dB\mu V/m)$	$(dB\mu V/m)$	$(dB\mu V/m)$	Kesult
102 (Peak)	5460.000	4.354	64.423	68.777	74.00	54.00	Pass
102 (Peak)	5507.000	4.833	96.771	101.604			
102 (Average)	5460.000	4.354	46.433	50.787	74.00	54.00	Pass
102 (Average)	5507.800	4.826	85.109	89.936			

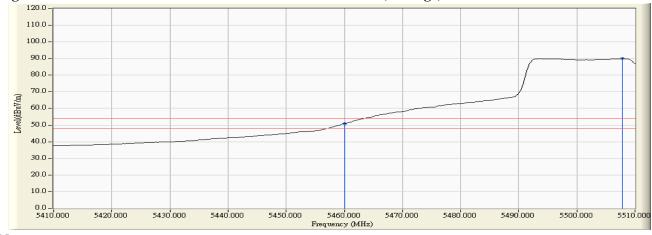
Figure Channel 102:

Horizontal (Peak)





Horizontal (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

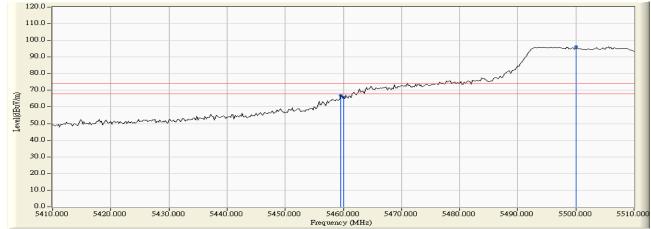
Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 102

RF Radiated Measurement (Vertical):

Channel No.	Frequency	Correct Factor	Reading Level	Emission Level	Peak Limit	Arerage Limit	Result
Channel No.	(MHz)	(dB)	(dBµV)	(dBµV/m)	(dBµV/m)	$(dB\mu V/m)$	Result
102 (Peak)	5459.600	6.039	60.880	66.918	74.00	54.00	Pass
102 (Peak)	5460.000	6.041	59.510	65.551	74.00	54.00	Pass
102 (Peak)	5500.000	6.275	89.907	96.182			
102 (Average)	5460.000	6.041	41.582	47.623	74.00	54.00	Pass
102 (Average)	5493.600	6.256	78.768	85.023			

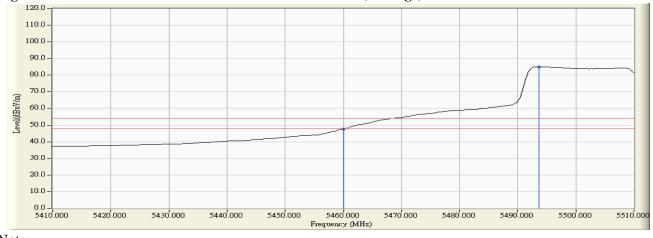
Figure Channel 102:

Vertical (Peak)





Vertical (Average)



- 1. All readings above 1GHz are performed with peak and/or average measurements as necessary.
- 2. Peak measurements: RBW = 1MHz, VBW = 3 MHz, Sweep: Auto.
- 3. Average measurements: RBW = 1MHz, VBW = 10 Hz, Sweep: Auto.
- 4. "*", means this data is the worst emission level.
- 5. Measurement Level = Reading Level + Correct Factor.
- 6. The average measurement was not performed when the peak measured data under the limit of average detection.

Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 102

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5470.000	13.958	-53.490	-39.532	-12.532	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5470.000	14.324	-64.640	-50.316	-23.316	-27.000	Pass

Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 134

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5725.000	12.135	-67.820	-55.685	-28.685	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5725.000	12.243	-74.520	-62.277	-35.277	-27.000	Pass



Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 151

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5715.000	12.198	-64.520	-52.322	-25.322	-27.000	Pass
Horizontal	5725.000	12.135	-59.800	-47.665	-30.665	-17.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5715.000	12.198	-64.520	-52.322	-25.322	-27.000	Pass
Vertical	5725.000	12.135	-59.800	-47.665	-30.665	-17.000	Pass



Product	:	VoIP Phone
Test Item	:	Band Edge Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) -Channel 159

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Horizontal	5850.000	12.835	-71.360	-58.525	-41.525	-17.000	Pass
Horizontal	5860.000	12.994	-71.070	-58.076	-31.076	-27.000	Pass

	Frequency (MHz)	Correct Factor (dB)	Reading Level (dBm)	Measure Level (dBm/m)	Margin (dB)	Limit (dBm/m)	Result
Vertical	5850.000	12.770	-73.530	-60.760	-43.760	-17.000	Pass
Vertical	5860.000	12.964	-75.970	-63.006	-36.006	-27.000	Pass

7. Occupied Bandwidth

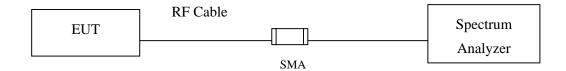
7.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun, 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun, 2014
Х	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

Note:

- 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
- 2. The test instruments marked with "X" are used to measure the final test results.

7.2. Test Setup



7.3. Limits

For the 5.725-5.85 GHz band, the minimum 6 dB bandwidth of U-NII devices shall be at least 500 kHz

7.4. .Test Procedure

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

7.5. Uncertainty

 \pm 150Hz

7.6. Test Result of Occupied Bandwidth

Product	:	VoIP Phone
Test Item	:	Occupied Bandwidth Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5745MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	16450	>500	Pass

		9.	nnel 14	t Una	rigui						
2014	07:51:18 PM Oct 28, 2014	ALIGNAUTO	1	SE:INT	SEN		ept SA AC	alyzer - Swe 50 Ω	um An		Agiler XI R
AMMAL .	TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	: Log-Pwr	Avg Type		Trig: Free #Atten: 30	Z 10: Fast 😱 Jain:Low		5.74500	req	iter F	Cer
	Mkr2 5.736 95 GHz dB/div Ref 20.00 dBm -0.03 dBm										
Center Free		1	<u>_</u> 3	\Diamond^1			N				.og
5.745000000 GH	0.44 dBm	_	halfort	pertintal	h-A-dauthan	2 Albaulum					0.00
	Man Manus Control Maria	WUNTERNINA	- Ant		-	and	hover an and a stall	1 - And All	-		0.0
Start Fre	The second states of the second							Red and a rate	ALFINAN	utown	20.0 30.0
5.720000000 GH								1			40.0
					-		-		_	_	50.0
Stop Free 5.770000000 GH				1	-					1	60.0
	201 200						1			2.000	70.0
	Span 50.00 MHz 4.80 ms (1001 pts)	Sweep 4			300 kHz	#VBW	-	0 GHz kHz		ter 5 s BW	
Auto Mar	FUNCTION VALUE	CTION WIDTH	TION		Y 6.44 dB		×		RC SCL	MODE	-
-			_	m	-0.03 dB -0.30 dB	5 GHz	5.746 45 5.736 95 5.753 40	-	f f	N N	1
Freq Offse				30	-0.30 08		0.705 40		-		456
									-		78
											9
_											11 12
		STATUS									ISG

Figure Channel 149:

Product	:	VoIP Phone
Test Item	:	Occupied Bandwidth Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5785MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	16450	>500	Pass

Figure Channel 157:

6 Frequency	07:59:22 PM Oct 28, 2014	LIGNAUTO	1 1	ISE:INT	SEN		AC	50 Ω	RF	L .	RI
Auto Tune	TRACE 123456 TYPE MWWWWW DET PNNNNN	: Log-Pwr	Avg Type		Trig: Free #Atten: 30	Z 0: Fast 😱 ain:Low		.78500	req :	ter F	en
	Mkr2 5.776 95 GHz -0.27 dBm -0.27 dBm										
Center Fre 5.785000000 GH	0.00 dBm		3	malissuedo	- Amandher						og 10.0 3.00
Start Fre 5.76000000 GH	Manywer was and and and the second	aninalianylvaalihy				Augurt	avanna an	yrwyl/yrwylLinek	n Huighn Alle	maviruit	10.0 20.0 30.0 40.0
Stop Fre 5.810000000 GH											50.0 50.0 70.0
CF Ste 5.000000 MH	Span 50.00 MHz I.80 ms (1001 pts)	1		_	300 kHz	#VBW) GHz (Hz	100	s BW	Re
<u>Auto</u> Ma	FUNCTION VALUE	CTION WIDTH	TION		Y 6.00 dE		× 5.778 90		RC SCL	N	1
Freq Offse 0 H					-0.27 dE -0.40 dE		5.776 95 5.793 40		l f l f	NN	2 3 4 5 6
											7 8 9
											10

Product	:	VoIP Phone
Test Item	:	Occupied Bandwidth Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 1: Transmit (802.11a-6Mbps) (5825MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	16450	>500	Pass

Figure Channel 165:

Mkr2 5.816 95 GHz -0.20 dBm Auto Tune 1 -0.20 dBm 6.82500000 GHz 1 -0.24 dBm 5.82500000 GHz 5.80000000 GHz 5.80000000 GHz 5.80000000 GHz 5.85000000 GHz 5.80000000 GHz Start Free 5.80000000 GHz 5.80000000 GHz 5.80000000 GHz Stop Free 5.850000000 GHz 5.850000000 GHz Span 50.00 MHz CF Step 5.000000 GHz 5.0000000 GHz	XI R			RF 50 Ω			SENS	E:INT		ALIGNAUTO		M Oct 28, 2014	Esternistication
Mkr2 5.816 95 GHz -0.20 dBm Auto Tune 1 -0.20 dBm 1 0.24 dBm </th <th>Cen</th> <th>ter</th> <th>Fred</th> <th>5.82500</th> <th>0000 GH</th> <th>z</th> <th>Tutus Faces</th> <th></th> <th>Avg Type</th> <th>: Log-Pwr</th> <th>TRAC</th> <th>E123456</th> <th>Frequency</th>	Cen	ter	Fred	5.82500	0000 GH	z	Tutus Faces		Avg Type	: Log-Pwr	TRAC	E123456	Frequency
Imitiz Start Free -0.20 dBm Center Free 1 0.24 dBm 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 5.850				1 an an	Pi IF(NO: Fast G Gain:Low	Trig: Free #Atten: 30		NG 7	-			Auto Tur
3 0.24 dBm Center Free 0.24 dBm 5.825000000 GH 0.24 dBm 5.825000000 GH 0.24 dBm Start Free 5.800000000 GH Stop Free 5.850000000 GH Stop Free 5.850000000 GH Stop Free Sweep 4.80 ms (1001 pts) CF Step 600 Freq Offsee	10 di	3/div	R	ef 20.00 c	IBm					Mkr:			Auto Tun
State State <th< td=""><td>Log 10.0</td><td>21</td><td>1</td><td></td><td>N</td><td>2</td><td></td><td></td><td>1 13</td><td></td><td></td><td></td><td>Center Fre</td></th<>	Log 10.0	21	1		N	2			1 13				Center Fre
Span 50.00 MHz 5.80000000 GH Stop Fre 5.850000000 GH Stop Fre 5.85000000 GH Sweep 4.80 ms (1001 pts) CF Ste ON FUNCTION WIDTH FUNCTION WIDTH FUNCTION WALLE Freq Offset Freq Offset	0,00		_			shule	- And hard hard hard hard	achister	We have the second				
Span 50.00 MHz 5.80000000 GH Stop Fre 5.850000000 GH Stop Fre 5.85000000 GH Sweep 4.80 ms (1001 pts) CF Ste ON FUNCTION WIDTH FUNCTION WIDTH FUNCTION WALLE Freq Offset Freq Offset	-10.0			MANN WWW	Amazina and a participation	menter .		-	here	Tonder a Thy work	Manna		
Span 50.00 MHz 5.80000000 GH Stop Fre 5.850000000 GH Stop Fre 5.85000000 GH Sweep 4.80 ms (1001 pts) CF Ste ON FUNCTION WIDTH FUNCTION WIDTH FUNCTION WALLE Freq Offset Freq Offset	20.0	1 m	Visiter	ANA MANAGARA				-			C. A. LANDARING MARK	with my ter must	Start Fre
Span 50.00 MHz 5.85000000 GH Sweep 4.80 ms (1001 pts) CF Ste Sweep 4.80 ms (1001 pts) 5.000000 MH ON FUNCTION WIDTH FUNCTION VALUE Freq Offset Freq Offset	-30.0	Miles .					-					1490	5.800000000 G
Span 50.00 MHz 5.85000000 GH Sweep 4.80 ms (1001 pts) CF Ste Sweep 4.80 ms (1001 pts) 5.000000 MH ON FUNCTION WIDTH FUNCTION VALUE Freq Offset Freq Offset	-40.0								-			-	and a start of the
Span 50.00 MHz CF Ste Sweep 4.80 ms (1001 pts) 5.000000 MHz ON FUNCTION WIDTH FUNCTION VALUE Freq Offse Freq Offse	-50.0												
Span 50.00 MHz Sweep 4.80 ms (1001 pts) ON FUNCTION VALUE ON FUNCTION VALUE Freq Offse	-60.0		_					-					
Sweep 4.80 ms (1001 pts) 5.000000 MH Auto Ma Freq Offse	-70.0	10											5.55000000 GI
Sweep 4.80 ms (1001 pts) 5.000000 MH ON FUNCTION WIDTH FUNCTION WALLE Freq Offse				00 GHz									CF Ste
Freq Offs	#Re	s Bl	N 10	0 kHz		#VB\	V 300 kHz			Sweep	4.80 ms (5.000000 MH
		MODE	TRC		X		Y COLUR		ICTION FUN	ICTION WIDTH	FUNCTIO	N VALUE	<u>Auto</u> Ma
	1	N	1	F	5.830 1 5.816 9	5 GHz	6.24 dB -0.20 dB	m					1
0H	3	N	1	f	5.833 4	0 GHz	-0.02 dB	m					1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1
	5												0 H
	6												
	8					1111		-					
	10												
	11	-						-					

Product	:	VoIP Phone
Test Item	:	Occupied Bandwidth Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5745MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
149	5745.00	17700	>500	Pass

Figure Channel 149:

Frequency	M Oct 28, 2014		ALIGNAUTO		SE:INT	SEN			50 Ω	RF		R
Ň	E 1 2 3 4 5 6	TRAC	: Log-Pwr	Avg Type	Run	Trig: Free		0000 GH	.74500	req	ter	en
	E MWWWWW T P N N N N N	Di				#Atten: 30	IO: Fast 🕞 iain:Low					
Auto Tun	30 GHz 16 dBm		Mkr					Bm	20.00 d	Ref	B/div	
Center Fre		-	1	<u>3</u>		1	1	5-1-1			71.1	og 10.0
5.745000000 GH	0.25 dBm	-	-	halisting	polling the	Matulto	- forther lies			-	-	D, OO, C
	-	and a second	Chinan Marine	4		_	A	WWW MARKANY R	Irmeel			10.0
Start Fre	International Marca	Della Providente la Ma							A COLORATED	herdered	MAN	20.0
5.720000000 GH		_						1.1				10.0
41.54.5				_						_		50.0
Stop Fred 5,770000000 GH							-		_			60.0
5.77000000 GI		200									2.0	70.0
CF Ste	0.00 MHz 1001 pts)		Sween			300 kHz	#\/B1A) GHz	7450		
5.000000 MH Auto Ma		FUNCTIO	CTION WIDTH		FUNC	300 KHZ	#VDV	×	012	RC SQL	2.57	
	NVACOL	темене			Im	6.25 dE		5.738 90		1 f	N	1
Freq Offse						-1.16 dE 0.07 dE) GHZ	5.736 30 5.754 00		1 f 1 f	N N	3
0 Hz		-				- C. 2						4
				-		-				-	-	67
												8
			-									9
											-	1
					0	-				-		A

Product	:	VoIP Phone
Test Item	:	Occupied Bandwidth Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5785MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
157	5785.00	17650	>500	Pass

Figure Channel 157:

Frequency	08:22:58 PM Oct 28, 2014	ALIGNAUTO		ISE:INT	SEN			50 Ω	RF			C R
V V	TRACE 1 2 3 4 5 6	: Log-Pwr	Avg Type	Dun] Trig: Free		0000 GH	78500	eq 5.	r Fre	nter	Cer
	TYPE MWWWWW DET P NNNNN				#Atten: 30	NO: Fast 🖵 Gain:Low						
Auto Tun	2 5.776 35 GHz -1.53 dBm	Mkr2					Bm	20.00 c	Ref	iv	B/div	
Center Fre			۸3	1	1	▲ ²					211	.og 10.0
5.785000000 GH	-0.72 dBm		melantra	Juliahal .	- Anterna	franch			-	-		0,00
		mannahan	4			1 et	n Analasan in Kon	1.41				-10.0
Start Fre	e and the address of the second	and the second					awawaanna kon	1047-97-9206	uninghan	Whall	ARTIN	-20.0
5.760000000 GH							- 1.1					-40.0
10.04									-		1 <u>—</u>	-50.0
Stop Free 5.810000000 GH										-		-60.0
0.01000000 011										1000		-70.0
CF Ste 5.000000 MH	Span 50.00 MHz .80 ms (1001 pts)	Sweep 4		4	300 kHz	#VBW		GHz Hz	8500 100 k			
<u>Auto</u> Ma	FUNCTION VALUE	CTION WIDTH	TION FUN	FUNC	Y		×			E TRC		
1. 46.48				3m	5.28 dE -1.53 dE	5 GHz	5.786 4 5.776 3		f	1	N	1
Freq Offse 0 H				3m	-1.00 dE	0 GHz	5.794 0		f	1	N	3
UH												5
												7
			1								-	9 10
												11 12
		STATUS		0						-0	-	

Product	:	VoIP Phone
Test Item	:	Occupied Bandwidth Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 2: Transmit (802.11n-20BW 7.2Mbps) (5825MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
165	5825.00	17700	>500	Pass

Figure Channel 165:

Frequency	08:32:51 PM Oct 28, 2014	LIGNAUTO		ISE:INT	SEN	_			RF		R
N N	TRACE 1 2 3 4 5 6	: Log-Pwr	Avg Type:	Run] Trig: Free		0000 GH	5.82500	req	ter F	en
	DET P NNNN				#Atten: 30	IO: Fast 😱 iain:Low					
Auto Tun	2 5.816 30 GHz -1.76 dBm	Mkr2					Bm	20.00 d	Ref	B/div	
Center Fre	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	1.		1	100		5 F. C	1.11		11	.og 10.0
5.825000000 GH	-0.72 dBm		landadow ?	- Andre la	be louderland	A 2 de			_	21	0.00
		Purelli burger	-			Def	10.00				10.0
Start Fre	Mary Mary Mary Mary	and and the following					ne ny manakana sa	AND DISPLANCE	Mum	do Bhé	20.0
5.80000000 G	a have			-						A STATE NEW	30.0
Vitar to tarte			· · · · · ·	1	-					1	40.0
Stop Freq 5.850000000 GHz				1						1	50.0 60.0
			1	i	-	1	i i	i i		1	70.0
12210	Span 50.00 MHz					_		0 GHz	8250	ter 5.	len
CF Ste 5.000000 MH	.80 ms (1001 pts)	Sweep 4.	1	0	300 kHz	#VBW				s BW	
<u>uto</u> Ma	FUNCTION VALUE	CTION WIDTH	TION FUNI	FUNC	Y	هم زوجه	×			MODE T	
				3m	5.28 dE) GHz	5.826 45 5.816 30		1 f 1 f	N	1
Freq Offse				3m	-0.98 dE) GHz	5.834 00		1 f	N	3
0 H											5
											7
						1.11 1.1					8
								1		-	9
											9 10 11

Product	:	VoIP Phone
Test Item	:	Occupied Bandwidth Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5755MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
151	5755.00	36500	>500	Pass

Figure Channel 151:

Education	08:42:13 PM Oct 28, 2014	ALIGN AUTO		SENSE:INT	SE			50 Ω	RF		R
Frequency	TRACE 1 2 3 4 5 6	: Log-Pwr	Avg Type	and Date	Trig: Fre		0000 GI	.75500	eq 5	ter Fr	en
	TYPE MWWWWW DET P N N N N N				#Atten: 3	PNO: Fast C Gain:Low					
Auto Tun	r2 5.736 9 GHz -4.83 dBm	Mk					Bm	20.00 d	Ref	3/div	
Center Fre	S 10	1		12-1			1.17		T		.og 10.0
5.755000000 GH	-3.29 dDm	3	(ALLANAL)	ton particulations	-	A2 Lou			_	24	0,00
				-		1					10.0
Start Fre	and the state of t	-valles along					magent data	hanced.	-	uth the	20.0
5.705000000 GH	a property of the										30.0 40.0
				-							50.0
Stop Fre 5.805000000 GH	· · · · · · · · · · · · · · · · · · ·										60.0 70.0
CF Ste	Span 100.0 MHz	- 20.5								ter 5.7	Cen
10.000000 MH	9.60 ms (1001 pts)				N 300 kHz	#VB	_	Hz		s BW	200
<u>Auto</u> Ma	FUNCTION VALUE	CTION WIDTH	CTION FUN		2.77 d	9 GHz	× 5.738		f	N 1	MKR 1
Freq Offse				dBm	-4.83 d	9 GHz 4 GHz	5.736	_	f	N 1 N 1	2
0 H											4
			-								6
						1101					8
		-									9
										-	11 12
											-

Product	:	VoIP Phone
Test Item	:	Occupied Bandwidth Data
Test Site	:	No.3 OATS
Test Mode	:	Mode 3: Transmit (802.11n-40BW 15Mbps) (5795MHz)

Channel No.	Frequency (MHz)	Measurement Level (kHz)	Required Limit (kHz)	Result
159	5795.00	36500	>500	Pass

Figure Channel 159:

	08:51:32 PM Oct 28, 2014	ALIGNAUTO		NSE:INT	SEI		AC		RF		RL
Frequency	TRACE 1 2 3 4 5 6	: Log-Pwr	Avg Type	o Dun	Trig: Free		00000 G	.79500	eq 5	r Fre	ente
	DET P NNNN				#Atten: 30	PNO: Fast C FGain:Low					
Auto Tun	r2 5.776 9 GHz -5.16 dBm	Mk					dBm	20.00	Ref	div	dB/d
Center Fre		t = 1		2-1		01	1.000	1	11		
5.79500000 GH	-4 U1 dEm	3	1 and	and the second	and the total show	A ² ¹			11.0	111	- 00
0.700000000	-4.01 dbm	1	hard to have be the low	a contraction that we have been a free of the	aggetach a fhailse (h-shisilag		-	1			
5.755A.0	and the same of th	and dealer and	1			and	er and a ladered	Lacoretes		-	.0
Start Fre	12 million of the second second second		-				-	AAssistant	(bus det?	winder	0
5.745000000 GH				1		1	1				.0
											.0
Stop Fre			-	-	-	-				_	.0 -
5.845000000 GH				-							.0 -
	Span 100.0 MHz) GHz	0500	7	L
CF Ste 10.000000 MH	9.60 ms (1001 pts)	Sweep 9			/ 300 kHz	#VB				BW 1	
<u>Auto</u> Ma	FUNCTION VALUE	CTION WIDTH	CTION FUI	FUN	Y		X		SCL	DE TRC	R MO
					1.99 di -5.16 di	3 9 GHz 3 9 GHz			f		N
Freq Offs			174		-5.16 di	34 GHz			f		N
01											-
				-							1
			4 14								1

8. Frequency Stability

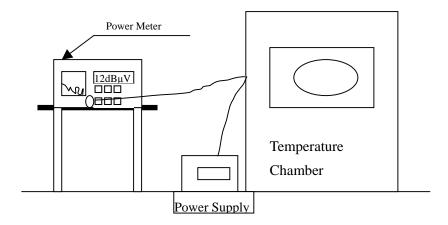
8.1. Test Equipment

	Equipment	Manufacturer	Model No./Serial No.	Last Cal.
	Spectrum Analyzer	R&S	FSP40 / 100170	Jun., 2014
	Spectrum Analyzer	Agilent	E4407B / US39440758	Jun., 2014
Х	Spectrum Analyzer	Agilent	N9010A / MY48030495	Apr., 2014

Note:

- 1. All equipments are calibrated with traceable calibrations. Each calibration is traceable to the national or international standards.
- 2. The test instruments marked with "X" are used to measure the final test results.

8.2. Test Setup



8.3. Limits

Manufactures 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

8.4. Test Procedure

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

8.5. Uncertainty

± 150 Hz

8.6. Test Result of Frequency Stability

Product	:	VoIP Phone
Test Item	:	Frequency Stability
Test Site	:	Temperature Chamber
Test Mode	:	Carrier Wave

Test Co	Test Conditions		Frequency (MHz)	Frequency (MHz)	△F (MHz)
		36	5180.0000	5180.0150	-0.0150
		38	5190.0000	5190.0210	-0.0210
		44	5220.0000	5220.0280	-0.0280
		46	5230.0000	5230.0010	-0.0010
		48	5240.0000	5240.0420	-0.0420
		52	5260.0000	5260.0450	-0.0450
		54	5270.0000	5270.0010	-0.0010
	Vnom (120)V	60	5300.0000	5300.0210	-0.0210
		62	5310.0000	5310.0150	-0.0150
		64	5320.0000	5320.0090	-0.0090
Tnom (20) oC		100	5500.0000	5500.0020	-0.0020
		102	5510.0000	5510.0190	-0.0190
		110	5550.0000	5550.0490	-0.0490
		116	5580.0000	5580.0320	-0.0320
		134	5670.0000	5670.0270	-0.0270
		140	5700.0000	5700.0200	-0.0200
		149	5745.0000	5745.0400	-0.0400
		151	5755.0000	5755.0280	-0.0280
		157	5785.0000	5785.0300	-0.0300
		159	5795.0000	5795.0330	-0.0330
		165	5825.0000	5825.0220	-0.0220



Test Co	Test Conditions		Frequency (MHz)	Frequency (MHz)	△F (MHz)
		36	5180.0000	5180.0290	-0.0290
		38	5190.0000	5190.0020	-0.0020
		44	5220.0000	5220.0210	-0.0210
		46	5230.0000	5230.0260	-0.0260
		48	5240.0000	5240.0150	-0.0150
		52	5260.0000	5260.0420	-0.0420
		54	5270.0000	5270.0090	-0.0090
	Vmax (138)V	60	5300.0000	5300.0120	-0.0120
		62	5310.0000	5310.0300	-0.0300
		64	5320.0000	5320.0150	-0.0150
Tmax (50) oC		100	5500.0000	5500.0430	-0.0430
		102	5510.0000	5510.0140	-0.0140
		110	5550.0000	5550.0300	-0.0300
		116	5580.0000	5580.0120	-0.0120
		134	5670.0000	5670.0390	-0.0390
		140	5700.0000	5700.0490	-0.0490
		149	5745.0000	5745.0370	-0.0370
		151	5755.0000	5755.0410	-0.0410
		157	5785.0000	5785.0070	-0.0070
		159	5795.0000	5795.0190	-0.0190
		165	5825.0000	5825.0050	-0.0050

0		-	
	110		K
Qu			

Test C	Test Conditions		Frequency (MHz)	Frequency (MHz)	△F (MHz)
		36	5180.0000	5180.0110	-0.0110
		38	5190.0000	5190.0370	-0.0370
		44	5220.0000	5220.0020	-0.0020
		46	5230.0000	5230.0390	-0.0390
		48	5240.0000	5240.0200	-0.0200
		52	5260.0000	5260.0220	-0.0220
		54	5270.0000	5270.0240	-0.0240
		60	5300.0000	5300.0210	-0.0210
		62	5310.0000	5310.0190	-0.0190
		64	5320.0000	5320.0370	-0.0370
Tmax (50) °C	Vmin (102)V	100	5500.0000	5500.0180	-0.0180
		102	5510.0000	5510.0480	-0.0480
		110	5550.0000	5550.0320	-0.0320
		116	5580.0000	5580.0190	-0.0190
		134	5670.0000	5670.0020	-0.0020
		140	5700.0000	5700.0190	-0.0190
		149	5745.0000	5745.0150	-0.0150
		151	5755.0000	5755.0190	-0.0190
		157	5785.0000	5785.0120	-0.0120
		159	5795.0000	5795.0490	-0.0490
		165	5825.0000	5825.0120	-0.0120



Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tnom (-10) oC	Vnom (138)V	36	5180.0000	5180.0280	-0.0280
		38	5190.0000	5190.0270	-0.0270
		44	5220.0000	5220.0150	-0.0150
		46	5230.0000	5230.0210	-0.0210
		48	5240.0000	5240.0060	-0.0060
		52	5260.0000	5260.0420	-0.0420
		54	5270.0000	5270.0470	-0.0470
		60	5300.0000	5300.0140	-0.0140
		62	5310.0000	5310.0230	-0.0230
		64	5320.0000	5320.0380	-0.0380
		100	5500.0000	5500.0060	-0.0060
		102	5510.0000	5510.0220	-0.0220
		110	5550.0000	5550.0100	-0.0100
		116	5580.0000	5580.0140	-0.0140
		134	5670.0000	5670.0080	-0.0080
		140	5700.0000	5700.0130	-0.0130
		149	5745.0000	5745.0260	-0.0260
		151	5755.0000	5755.0170	-0.0170
		157	5785.0000	5785.0270	-0.0270
		159	5795.0000	5795.0380	-0.0380
		165	5825.0000	5825.0220	-0.0220



Test Conditions		Channel	Frequency (MHz)	Frequency (MHz)	△F (MHz)
Tmax (-10) oC	Vmax (102)V	36	5180.0000	5180.0130	-0.0130
		38	5190.0000	5190.0050	-0.0050
		44	5220.0000	5220.0420	-0.0420
		46	5230.0000	5230.0230	-0.0230
		48	5240.0000	5240.0240	-0.0240
		52	5260.0000	5260.0180	-0.0180
		54	5270.0000	5270.0230	-0.0230
		60	5300.0000	5300.0050	-0.0050
		62	5310.0000	5310.0220	-0.0220
		64	5320.0000	5320.0070	-0.0070
		100	5500.0000	5500.0070	-0.0070
		102	5510.0000	5510.0410	-0.0410
		110	5550.0000	5550.0130	-0.0130
		116	5580.0000	5580.0240	-0.0240
		134	5670.0000	5670.0330	-0.0330
		140	5700.0000	5700.0440	-0.0440
		149	5745.0000	5745.0430	-0.0430
		151	5755.0000	5755.0470	-0.0470
		157	5785.0000	5785.0180	-0.0180
		159	5795.0000	5795.0440	-0.0440
		165	5825.0000	5825.0250	-0.0250

9. EMI Reduction Method During Compliance Testing

No modification was made during testing.

Attachment 1: EUT Test Photographs

Attachment 2: EUT Detailed Photographs