

FCC CFR47 PART 15 SUBPART C INDUSTRY CANADA RSS-210 ISSUE 8 (ADDITIONAL CHANNELS 12 AND 13)

CERTIFICATION TEST REPORT

FOR

QUAD-BAND RADIO WITH WLAN AND BT RADIO

MODEL NUMBER: A1456, A1532

FCC ID: BCG-E2644A IC: 579C-E2644A, 579C-E2644B

REPORT NUMBER: 13U14987-17, REVISION B

ISSUE DATE: SEPTEMBER 06, 2013

Prepared for
APPLE
1 INFINITE LOOP
CUPERTINO, CA 95014, U.S.A

Prepared by

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REPORT NO: 13U14987-17B DATE: SEPTEMBER 06, 2013 FCC ID: BCG-E2644A IC: 579C-E2644A, 579C-E2644B

Revision History

Rev.	Issue Date	Revisions	Revised By
	08/23/13	Initial Issue	T. Chan
A	08/26/13	Addressed TCB's Questions	C. Pang
В	09/06/13	Add EUT Description	C. Pang

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DATE: SEPTEMBER 06, 2013 IC: 579C-E2644A, 579C-E2644B

1. ATTESTATION OF TEST RESULTS

COMPANY NAME: APPLE

1 INFINITE LOOP

CUPERTINO, CA 95014, U.S.A

EUT DESCRIPTION: QUAD-BAND RADIO WITH WLAN AND BT RADIO

MODEL: A1456, A1532

SERIAL NUMBER: 39KD007FHYY (Conducted), C39KP005FL57 (Radiated)

DATE TESTED: AUGUST 06 - 19, 2013

APPLICABLE STANDARDS

STANDARD TEST RESULTS

CFR 47 Part 15 Subpart C

Pass

INDUSTRY CANADA RSS-210 Issue 8 Annex 8

Pass

INDUSTRY CANADA RSS-GEN Issue 3

Pass

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. All indications of Pass/Fail in this report are opinions expressed by UL Verification Services Inc. based on interpretations and/or observations of test results. Measurement Uncertainties were not taken into account and are published for informational purposes only. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

Note: The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document. This report must not be used by the client to claim product certification, approval, or endorsement by NVLAP, NIST, any agency of the Federal Government, or any agency of any government.

Approved & Released For

UL Verification Services Inc. By:

Tested By:

Thu Chan

WiSE Operations Manager

UL Verification Services Inc.

Oliver Su WiSE Engineer

UL Verification Services Inc.

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2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, ANSI C63.10-2009, RSS-GEN Issue 3, and RSS-210 Issue 8.

3. FACILITIES AND ACCREDITATION

The test sites and measurement facilities used to collect data are located at 47173 Benicia Street, Fremont, California, USA.

The test sites and measurement facilities used to collect data are located at 47173 and 47266 Benicia Street, Fremont, California, USA. Line conducted emissions are measured only at the 47173 address. The following table identifies which facilities were utilized for radiated emission measurements documented in this report. Specific facilities are also identified in the test results sections.

47173 Benicia Street	47266 Benicia Street
☐ Chamber A	☐ Chamber D
☐ Chamber B	
☐ Chamber C	☐ Chamber F

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at http://www.ccsemc.com.

4. CALIBRATION AND UNCERTAINTY

4.1. MEASURING INSTRUMENT CALIBRATION

The measuring equipment utilized to perform the tests documented in this report has been calibrated in accordance with the manufacturer's recommendations, and is traceable to recognized national standards.

4.2. SAMPLE CALCULATION

Where relevant, the following sample calculation is provided:

Field Strength (dBuV/m) = Measured Voltage (dBuV) + Antenna Factor (dB/m) + Cable Loss (dB) - Preamp Gain (dB)

36.5 dBuV + 18.7 dB/m + 0.6 dB - 26.9 dB = 28.9 dBuV/m

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	UNCERTAINTY
Conducted Disturbance, 0.15 to 30 MHz	3.52 dB
Radiated Disturbance, 30 to 1000 MHz	4.94 dB

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

Model A1456/A1532 is a mobile phone with multimedia functions (music, application support, and video), cellular GSM/GPRS/EGPRS/WCDMA/HSPA+/DC-HSDPA/CDMA/EVDO/LTE radio, IEEE 802.11a/b/g/n, Bluetooth and GPS radio. The rechargeable battery is not user accessible.

5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum conducted output power as follows:

Frequency Range	Mode	Output Power	Output Power
(MHz)		(dBm)	(mW)
2467 - 2472	802.11b	18.48	70.47
2467 - 2472	802.11g	19.840	96.38
2467 - 2472	802.11n HT20	19.510	89.33

5.3. WORST-CASE CONFIGURATION AND MODE

Channels 12 and 13 don't have the highest output power, therefore, only 6dB bandwidth, output power, conducted and radiated spurious harmonic test items were performed. Due to the lower power (than Channels 1-11) and the uniform distribution of power according to the occupied bandwidth plots, PSD measurements are not required.

The fundamental of the EUT was investigated in three orthogonal orientations X, Y, Z, it was determined that X orientation was worst-case orientation for 2.4GHz; therefore, all final radiated testing was performed with the EUT in worst case orientation.

Worst-case data rates as provided by the client were: Based on the baseline scan, the worst-case data rates were:

802.11b mode: 1 Mbps 802.11g mode: 6 Mbps 802.11n HT20mode: MCS0

6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

Test Equipment List				
Description	Manufacturer	Model	Asset	Cal Due
Horn Antenna 1-18GHz	ETS Lindgren	3117	F00133	02/19/14
Preamplifier, 1300 MHz	Agilent / HP	8447D	C00580	01/28/14
Antenna, Horn, 26.5 GHz	ARA	SWH-28	C01015	05/06/14
Antenna, Biconolog, 30MHz-1 GHz	Sunol Sciences	JB3	F00215	03/07/14
Peak / Average Power Sensor	Agilent / HP	E9323A	F00026	07/27/14
P-Series single channel Power Meter	Agilent / HP	N1911A	F00153	07/26/14
Spectrum Analyzer, 3Hz-44GHz	Agilent	N9030A	F00127	02/22/14
PreApmplifier, 1-26.5GHz	Agilent	8449B	C01052	10/22/13
LISN, 30 MHz	FCC	LISN-50/250-25-2	N02625	04/17/14
Antenna, Horn, 40 GHz	ARA	MWH-2640/B	C00981	06/14/14
EMI Test Receiver, 30 MHz	R & S	ESHS 20	N02396	08/15/14

7. ANTENNA PORT TEST RESULTS

7.1. 2.4 GHz BAND

7.1.1. 6 dB BANDWIDTH

LIMITS

FCC §15.247 (a) (2)

IC RSS-210 A8.2 (a)

The minimum 6 dB bandwidth shall be at least 500 kHz.

TEST PROCEDURE

KDB 558074 D01 v01 "Guidance for Performing Compliance Measurements on Digital Transmission Systems (DTS) Operating Under 15.247".

RESULTS

b mode

Channel	Frequency	6 dB Bandwidth	Minimum Limit
	(MHz)	(MHz)	(MHz)
12	2462	8.080	0.5
13	2472	8.080	0.5

g mode

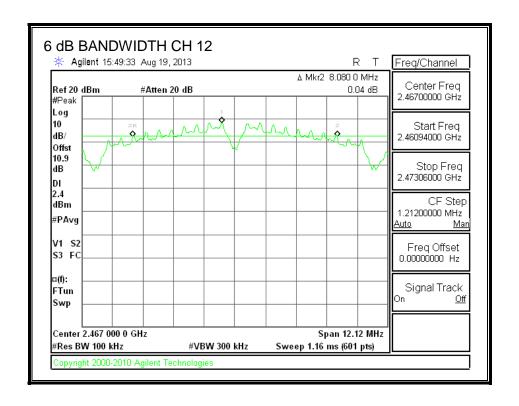
Channel Frequency 6 dB B		6 dB Bandwidth	Minimum Limit
	(MHz)	(MHz)	(MHz)
12	2462	15.140	0.5
13	2472	15.140	0.5

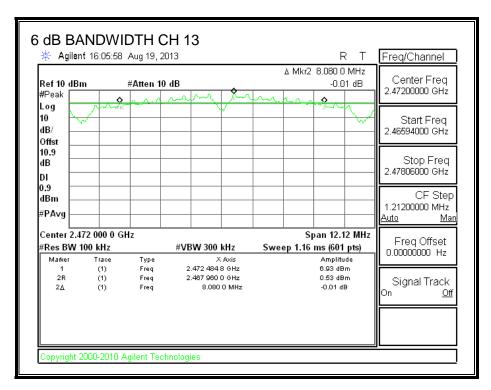
HT20 mode

Channel Frequency		6 dB Bandwidth	Minimum Limit
	(MHz)	(MHz)	(MHz)
12	2462	15.130	0.5
13	2472	15.130	0.5

B MODE

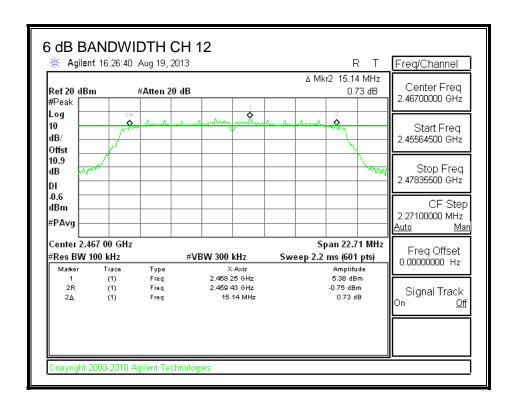
6 dB BANDWIDTH

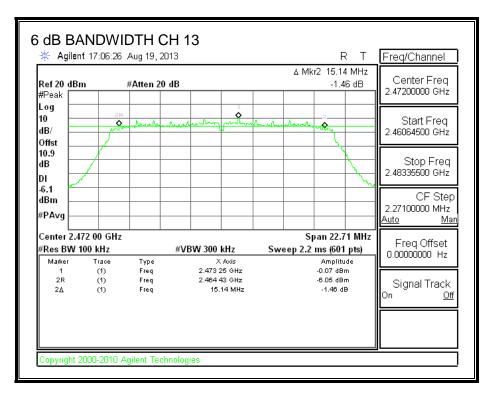




G MODE

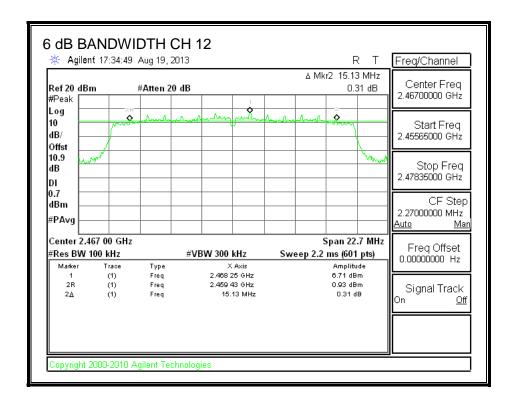
6 dB BANDWIDTH

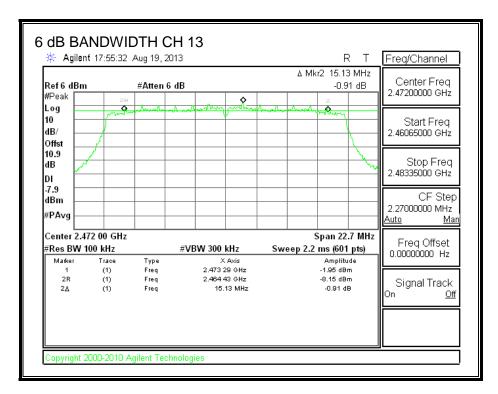




HT20 MODE

6 dB BANDWIDTH





7.1.2. AVERAGE POWER

LIMITS

None; for reporting purposes only.

TEST PROCEDURE

The transmitter output is connected to a power meter.

The cable assembly insertion loss of 11 dB (including 10 dB pad and 1dB cable) was entered as an offset in the power meter to allow for direct reading of power.

RESULTS

b mode

Channel	Frequency	Power
	(MHz)	(dBm)
12	2467	15.50
13	2472	14.00

g mode

Channel	Frequency	Power
	(MHz)	(dBm)
12	2467	11.50
13	2472	4.50

HT20 mode

Channel	Frequency	Power
	(MHz)	(dBm)
12	2467	11.42
13	2472	4.50

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7.1.3. OUTPUT POWER

LIMITS

FCC §15.247

IC RSS-210 A8.4

For systems using digital modulation in the 902–928 MHz, 2400–2483.5 MHz, and 5725–5850 MHz bands: 1 Watt, based on the use of antennas with directional gains that do not exceed 6 dBi. If transmitting antennas of directional gain greater than 6 dBi are used, the conducted output power from the intentional radiator shall be reduced by the amount in dB that the directional gain of the antenna exceeds 6 dBi.

DIRECTIONAL ANTENNA GAIN

There is only one transmitter output therefore the directional gain is equal to the antenna gain.

RESULTS

Limits

Channel	Frequency Directional		FCC	IC	IC	Max
		Gain	Power	Power	EIRP	Power
			Limit	Limit	Limit	
	(MHz)	(dBi)	(dBm)	(dBm)	(dBm)	(dBm)
12	2467	0.21	30.00	30	36	30.00
13	2472	0.21	30.00	30	36	30.00

Results (b mode)

Channel	Frequency		Total	Power	Margin
		Meas	Corr'd	Limit	
		Power	Power		
	(BALL_)	(-ID)	(ID)	(-ID)	(-ID)
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
12	2467	18.48	18.48	30.00	-11.52

Limits

Channel	Frequency Directiona		Frequency Directional FCC IC		IC	IC	Max	
		Gain	Power	Power	EIRP	Power		
			Limit	Limit	Limit			
	(MHz)	(dBi)	(dBm)	(dBm)	(dBm)	(dBm)		
12	2467	0.21	30.00	30	36	30.00		
13	2472	0.21	30.00	30	36	30.00		

Results (g mode)

Channel	Frequency		Total	Power	Margin
		Meas	Corr'd	Limit	
		Power	Power		
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)
	(1411 12)	(abiii)	(ubiii)	(abiii)	(GD)
12	2467	19.84	19.84	30.00	-10.16

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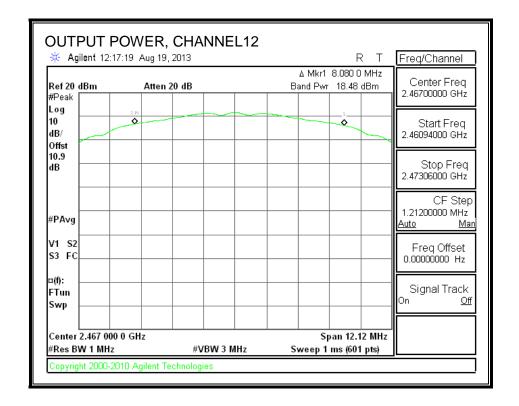
Limits

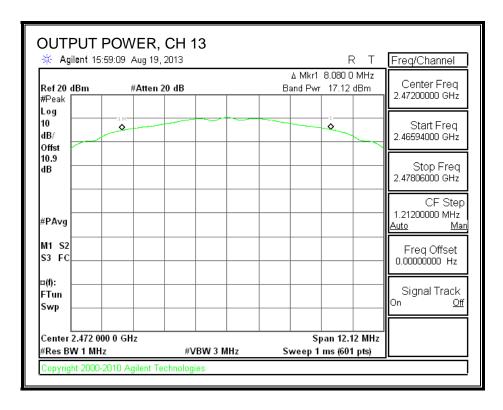
Channel	Frequency Directional FCC		IC IC		Max	
		Gain Powe		Power	EIRP	Power
			Limit	Limit	Limit	
	(MHz)	(dBi)	(dBm)	(dBm)	(dBm)	(dBm)
		` '				
12	2467	0.21	30.00	30	36	30.00

Results (n mode)

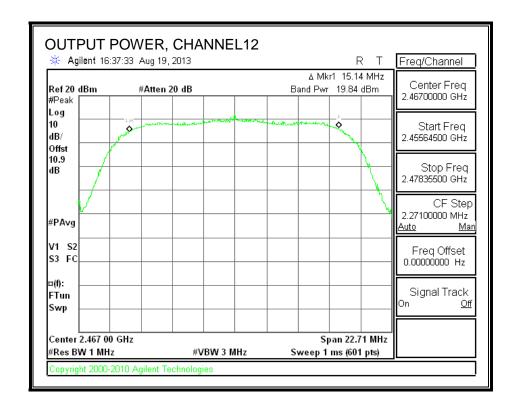
. 10 04.10 (.		results (it in sus)								
Channel	Frequency	Frequency Total		Power	Margin					
		Meas	Corr'd	Limit						
		Power	Power							
	(MHz)	(dBm)	(dBm)	(dBm)	(dB)					
12	2467	19.51	19.51	30.00	-10.49					
13	2472	12.95	12.95	30.00	-17.05					

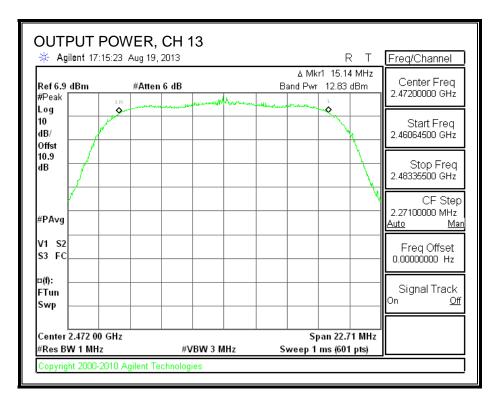
B MODE OUTPUT POWER



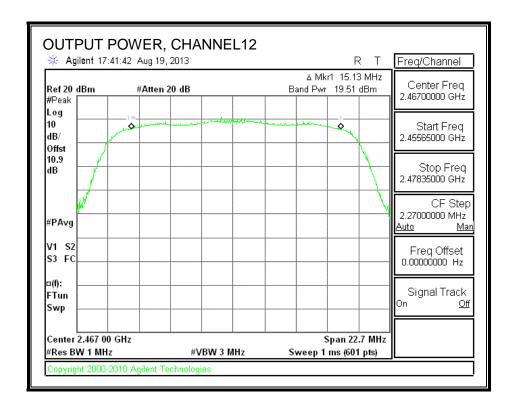


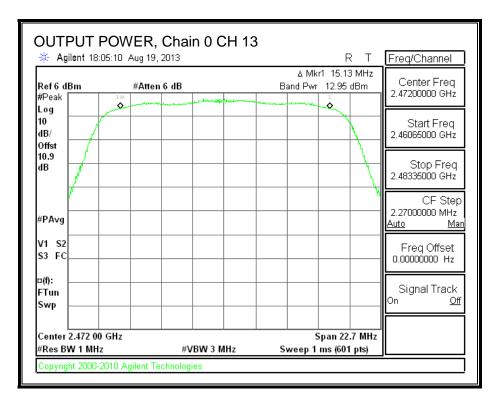
G MODE OUTPUT POWER





HT20 MODE OUTPUT POWER





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7.1.4. OUT-OF-BAND EMISSIONS

LIMITS

FCC §15.247 (d)

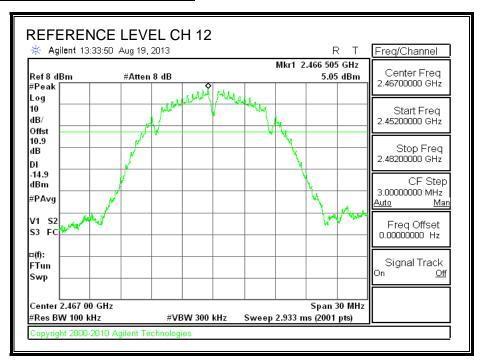
IC RSS-210 A8.5

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum or digitally modulated intentional radiator is operating, the radio frequency power that is produced by the intentional radiator shall be at least 20 dB below that in the 100 kHz bandwidth within the band that contains the highest level of the desired power, based on either an RF conducted or a radiated measurement, provided the transmitter demonstrates compliance with the peak conducted power limits. If the transmitter complies with the conducted power limits based on the use of RMS averaging over a time interval, as permitted under paragraph (b)(3) of this section, the attenuation required under this paragraph shall be 30 dB instead of 20 dB. Attenuation below the general limits specified in §15.209(a) is not required.

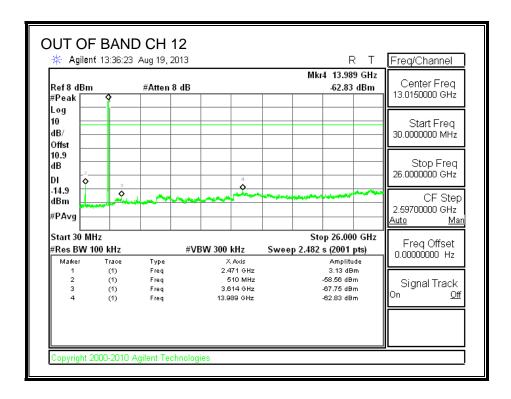
TEST PROCEDURE

The transmitter output is connected to a spectrum analyzer with RBW = 100 kHz, VBW = 300 kHz, peak detector, and max hold. Measurements utilizing these settings are made of the inband reference level, band edge (where measurements to the general radiated limits will not be made) and out-of-band emissions.

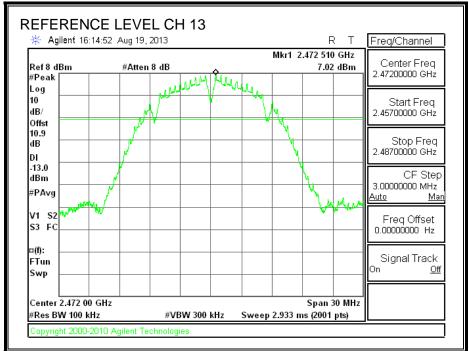
B MODE IN-BAND REFERENCE LEVEL



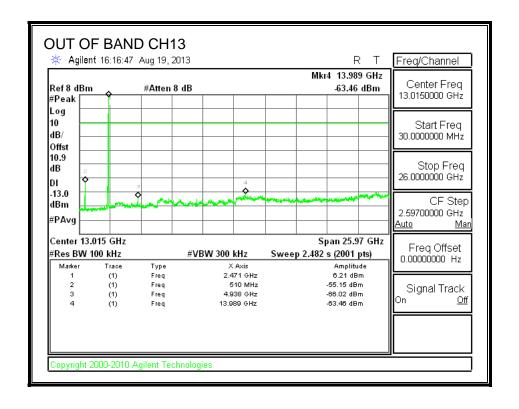
B MODE OUT-OF-BAND EMISSION



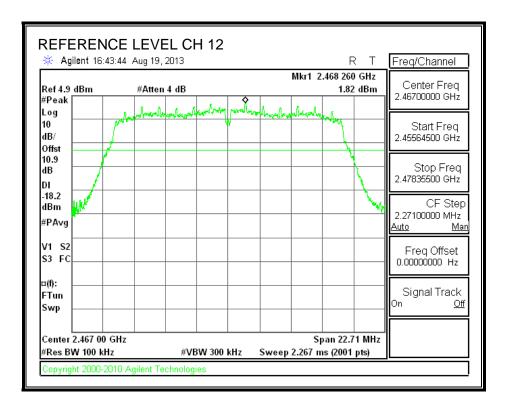
FCC ID: BCG-E2644A



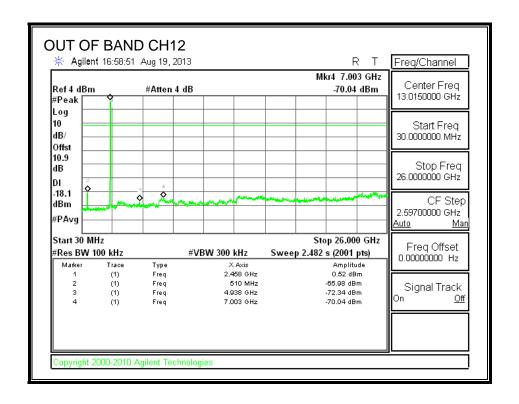
B MODE OUT-OF-BAND EMISSION



G MODE IN-BAND REFERENCE LEVEL

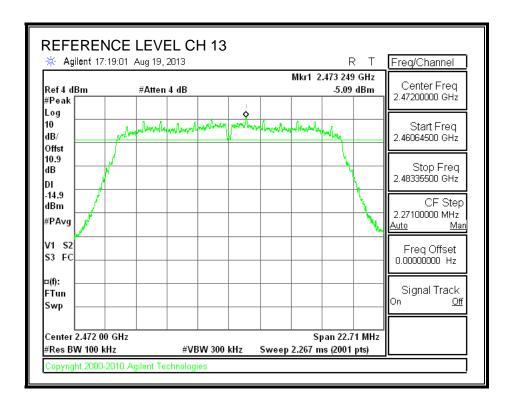


G MODE OUT-OF-BAND EMISSIONS

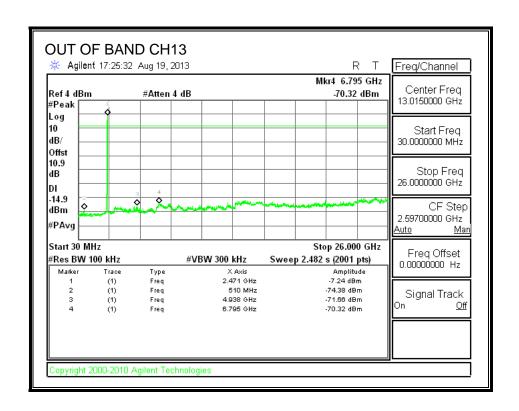


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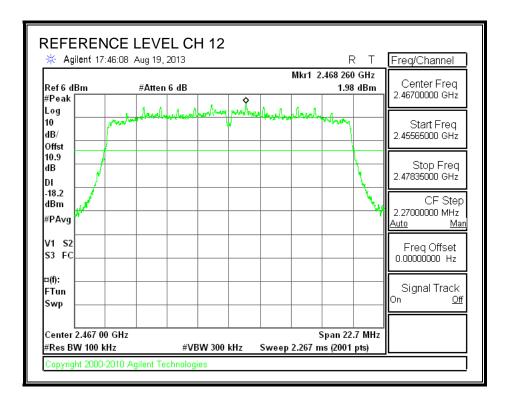
G MODE IN-BAND REFERENCE LEVEL



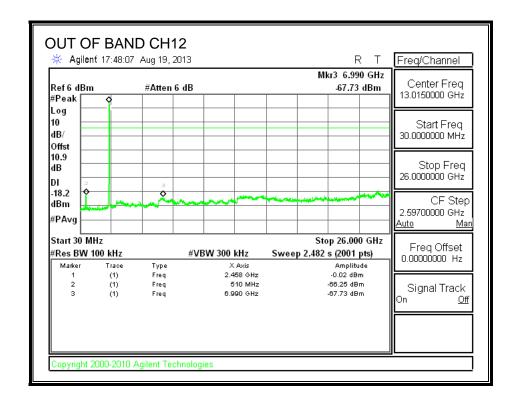
G MODE OUT-OF-BAND EMISSIONS



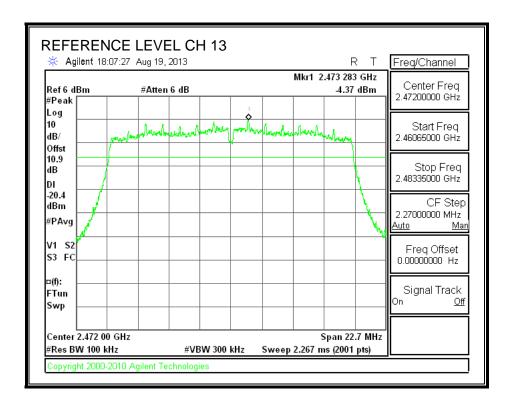
HT20 MODE IN-BAND REFERENCE LEVEL



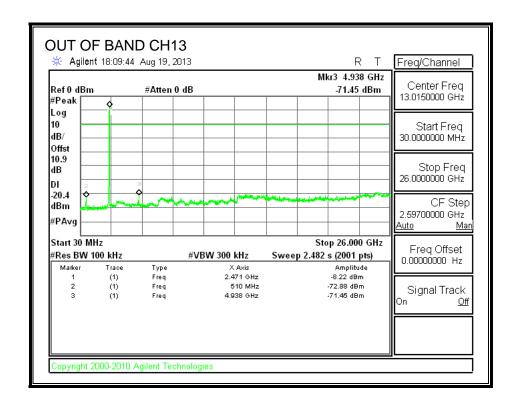
OUT-OF-BAND EMISSIONS



HT20 MODE IN-BAND REFERENCE LEVEL



OUT-OF-BAND EMISSIONS



8. RADIATED TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMITS

FCC §15.205 and §15.209

IC RSS-210 Clause 2.6 (Transmitter)

Frequency Range (MHz)	Field Strength Limit (uV/m) at 3 m	Field Strength Limit (dBuV/m) at 3 m
30 - 88	100	40
88 - 216	150	43.5
216 - 960	200	46
Above 960	500	54

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane. The antenna to EUT distance is 3 meters.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

For measurements above 1 GHz the resolution bandwidth is set to 1 MHz; the video bandwidth is set to 1 MHz for peak measurements and as applicable for average measurements.

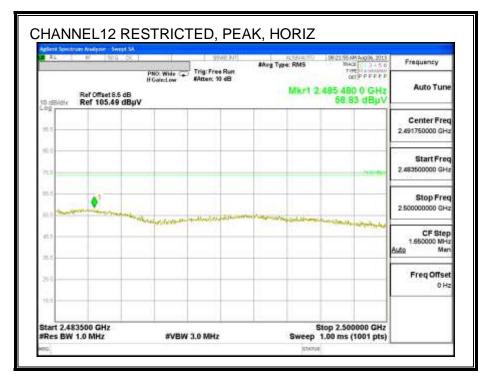
The spectrum from 30 MHz to 40 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in each applicable band.

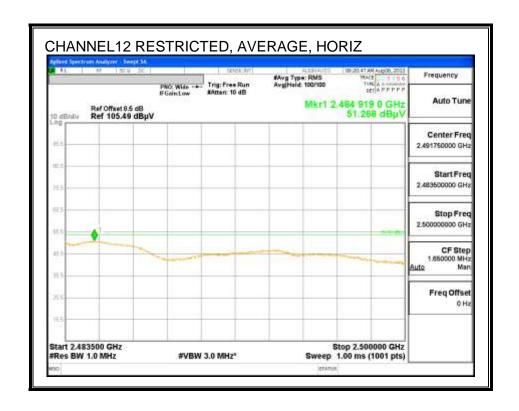
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

8.2. TRANSMITTER ABOVE 1 GHz

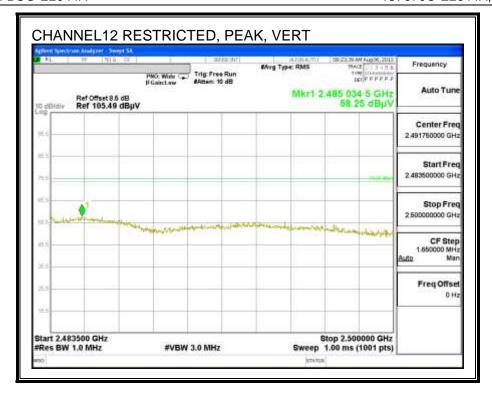
8.2.1. TX ABOVE 1 GHz 802.11B MODE IN THE 2.4 GHz BAND

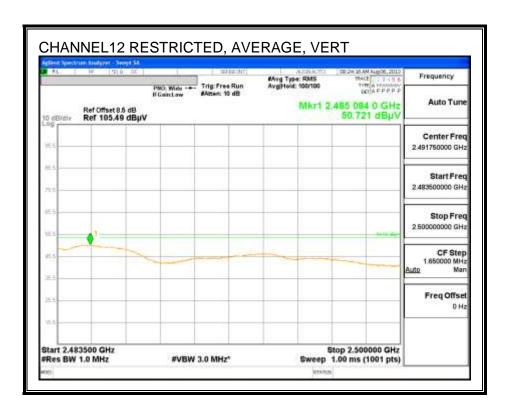
RESTRICTED BANDEDGE (LOW CHANNEL)

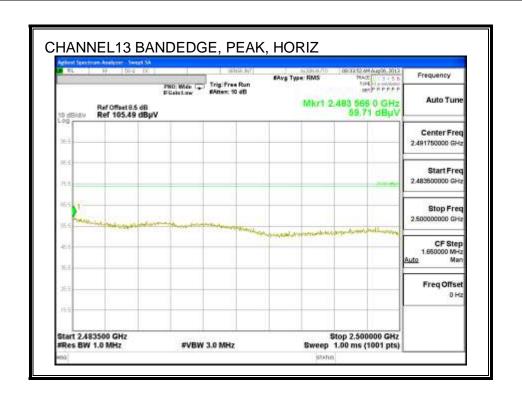


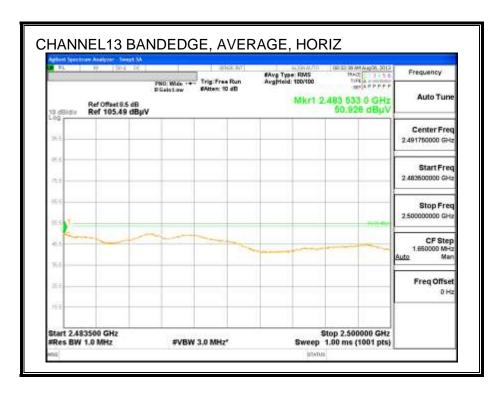


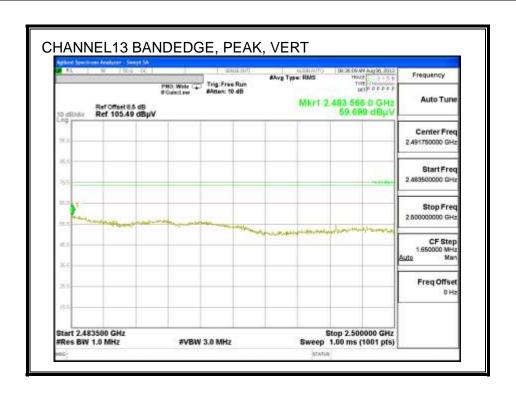
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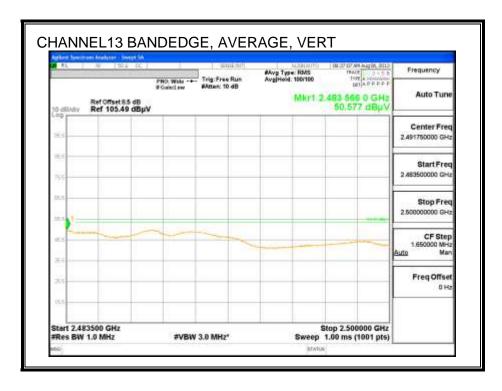




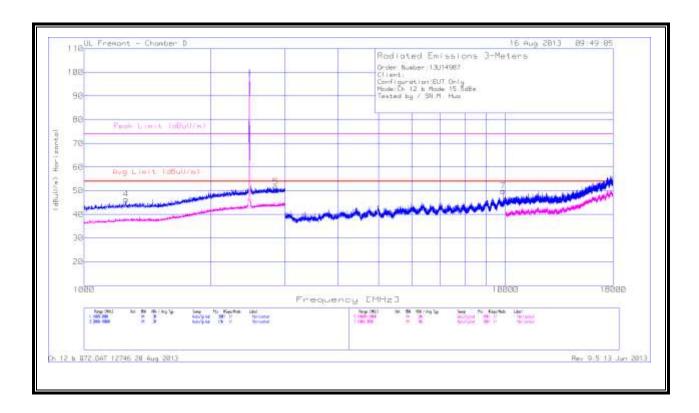




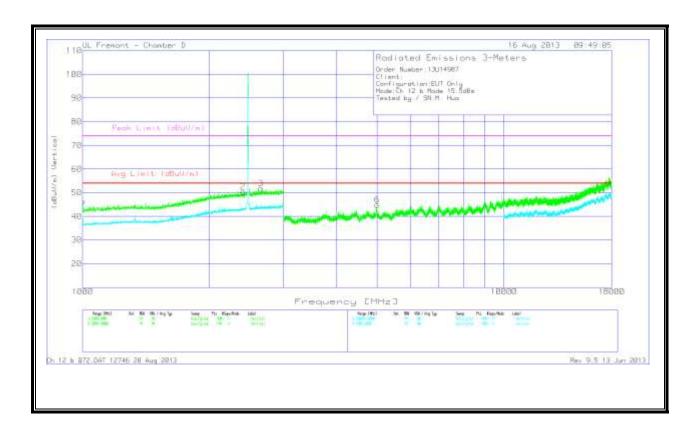




HARMONICS AND SPURIOUS EMISSIONS



HARMONICS AND SPURIOUS EMISSIONS



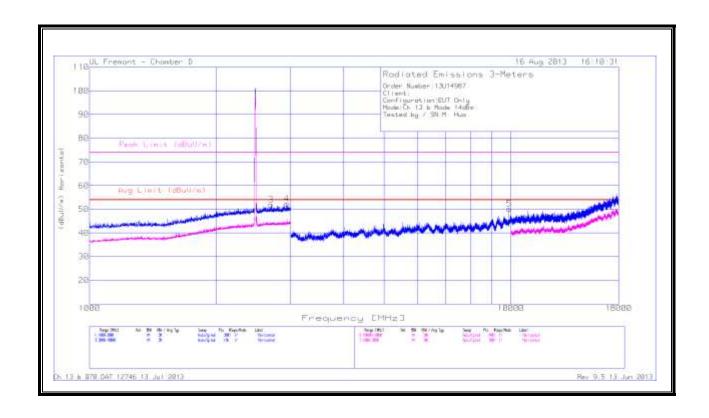
DATA

Frequency (GHz)	Meter Reading (dBuV)	Det	T344 Ant Factor [dB/m]	Amp/Cbl/Fl tr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1.258	43.51	PK	28.6	-25.7	46.41	53.97	-7.56	74	-27.59	201	Н
2.852	42.6	PK	33	-23.9	51.7	53.97	-2.27	74	-22.3	100	Н
2.854	30.38	MAv1	33	-23.9	39.48	53.97	-14.49	74	-34.52	296	Н
1.001	44.92	PK	27.7	-26.2	46.42	53.97	-7.55	74	-27.58	301	V
2.404	42.24	PK	32.4	-24.3	50.34	53.97	-3.63	74	-23.66	401	V
2.405	30.88	MAv1	32.4	-24.3	38.98	53.97	-14.99	74	-35.02	153	V
2.649	42.94	PK	32.7	-23.9	51.74	53.97	-2.23	74	-22.26	401	V
2.65	31.0	MAv1	32.7	-23.9	39.8	53.97	-14.17	74	-34.2	339	V
*9.868	38.26	PK	37.6	-26	49.86					300	Н
4.999	41.55	PK	34.3	-31	44.85	53.97	-9.12	74	-29.15	201	V

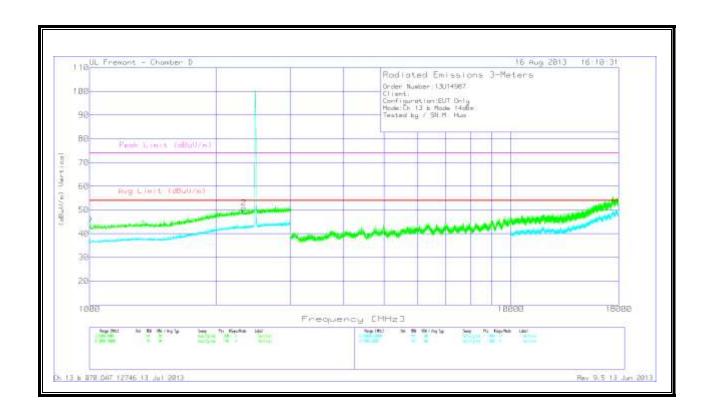
^{*}Not in Restricted Band

MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

HARMONICS AND SPURIOUS EMISSIONS



HARMONICS AND SPURIOUS EMISSIONS



REPORT NO: 13U14987-17B DATE: SEPTEMBER 06, 2013 FCC ID: BCG-E2644A IC: 579C-E2644B

<u>DATA</u>

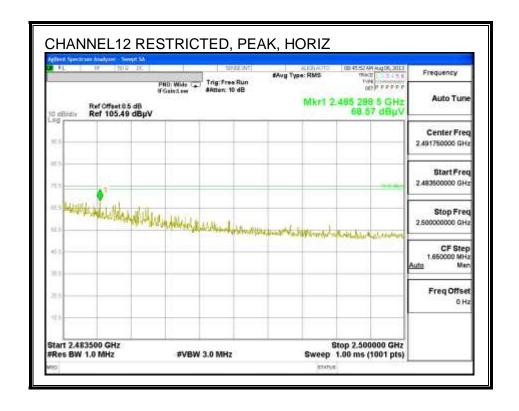
Frequency (GHz)	Meter Reading (dBuV)	Det	T344 Ant Factor [dB/m]	Amp/Cbl/Fl tr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
2.695	42.99	PK	32.8	-23.9	51.89	53.97	-2.08	74	-22.11	100	Н
2.691	30.7	MAv1	32.8	-23.9	39.6	53.97	-14.37	74	-34.4	195	Н
2.935	43.14	PK	33	-23.8	52.34	53.97	-1.63	74	-21.66	100	Н
2.934	30.62	MAv1	33	-23.8	39.82	53.97	-14.15	74	-34.18	209	Н
1.001	45.19	PK	27.7	-26.2	46.69	53.97	-7.28	74	-27.31	301	V
2.323	42.8	PK	32.4	-24.4	50.8	53.97	-3.17	74	-23.2	401	V
*9.889	38.33	PK	37.7	-25.9					-23.87	301	Н

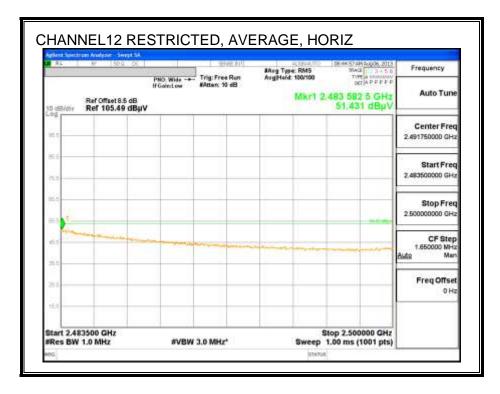
^{*}Not in Restricted Band

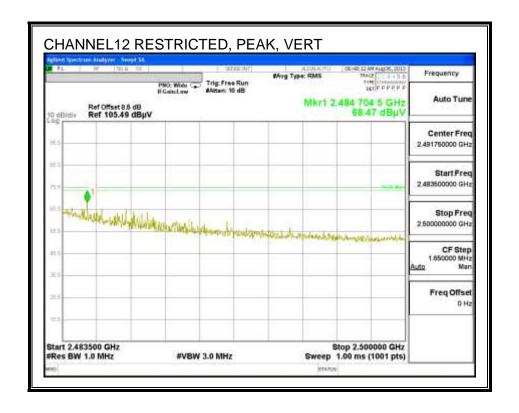
MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

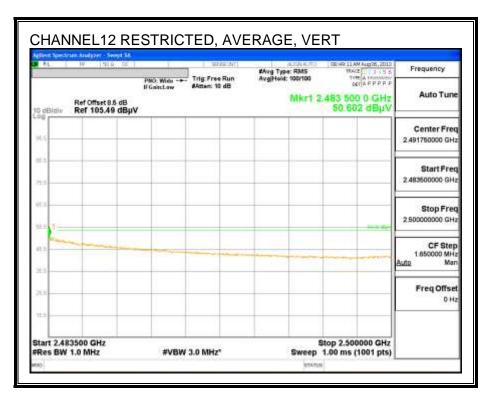
8.2.2. TX ABOVE 1 GHz 802.11G MODE IN THE 2.4 GHz BAND

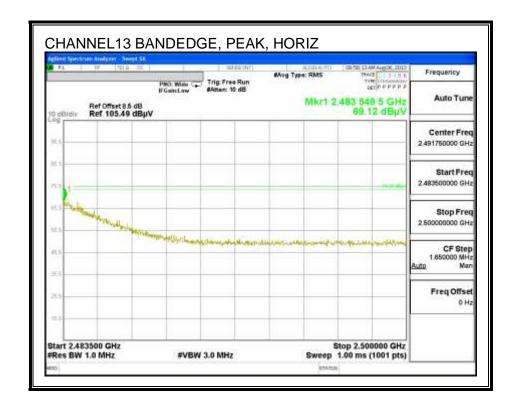
RESTRICTED BANDEDGE (LOW CHANNEL)

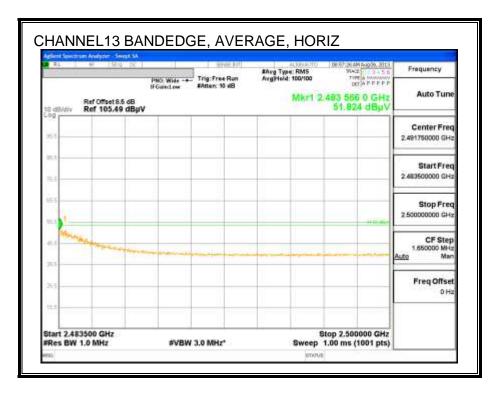


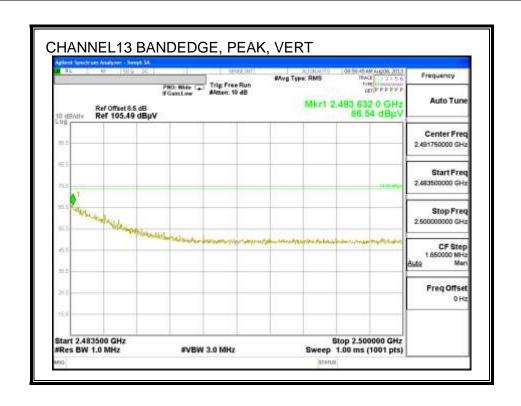


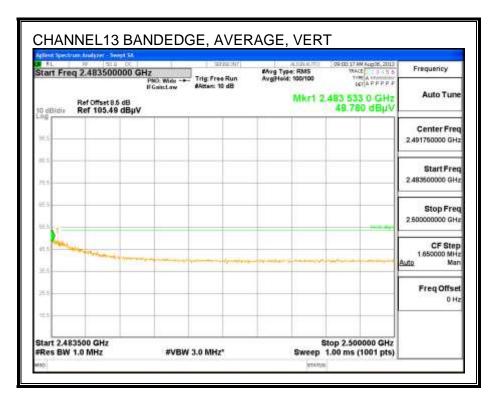


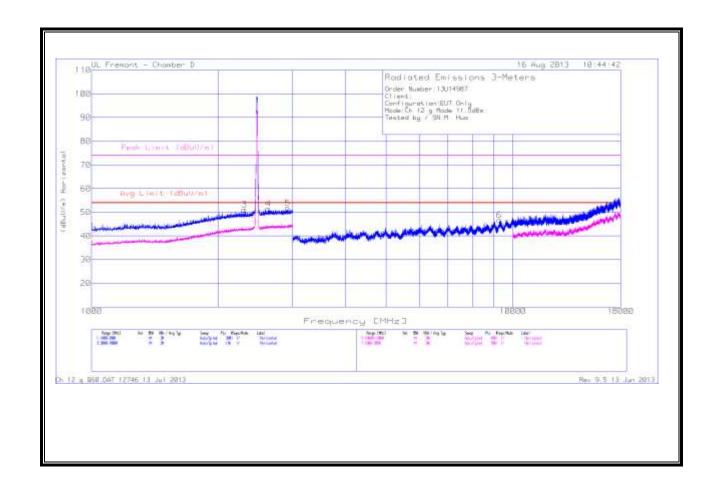


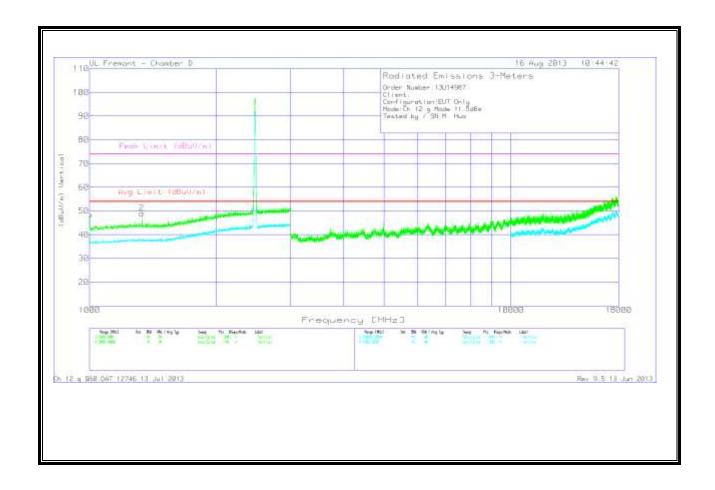










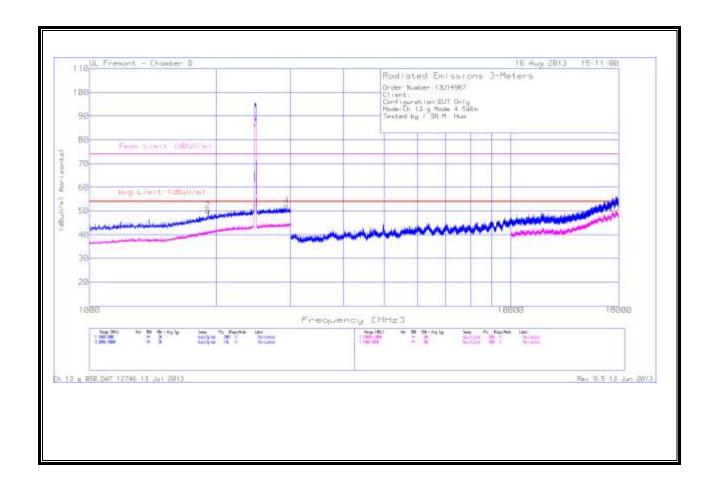


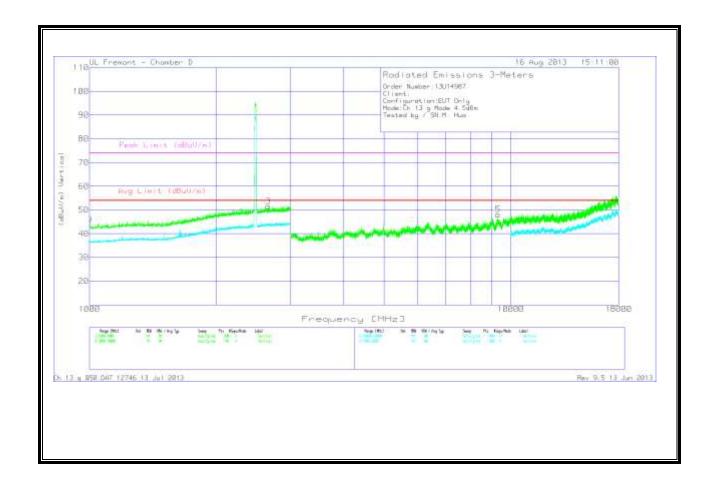
<u>DATA</u>

Frequency (GHz)	Meter Reading	Det	T344 Ant Factor [dB/m]	Amp/Cbl/Fl tr/Pad (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
	(dBuV)				(dBuV/m)						
2.305	43.15	PK	32.4	-24.4	51.15	53.97	-2.82	74	-22.85	201	Н
2.303	30.65	MAv1	32.4	-24.4	38.65	53.97	-15.32	74	-35.35	168	Н
2.626	42.76	PK	32.7	-24	51.46	53.97	-2.51	74	-22.54	400	Н
2.623	30.75	MAv1	32.6	-24	39.35	53.97	-14.62	74	-34.65	295	Н
2.921	42.54	PK	33	-23.8	51.74	53.97	-2.23	74	-22.26	400	Н
2.923	30.51	MAv1	33	-23.8	39.71	53.97	-14.26	74	-34.29	324	Н
1.001	46.87	PK	27.7	-26.2	48.37	53.97	-5.6	74	-25.63	100	V
1.33	46.16	PK	28.5	-25.6	49.06	53.97	-4.91	74	-24.94	301	V
1.327	30.96	MAv1	28.5	-25.6	33.86	53.97	-20.11	74	-40.14	261	V
*9.281	35.12	PK	36.9	-25.4	46.62					301	Н

^{*}Not in Restricted Band

MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average





REPORT NO: 13U14987-17B DATE: SEPTEMBER 06, 2013 FCC ID: BCG-E2644A IC: 579C-E2644B

<u>DATA</u>

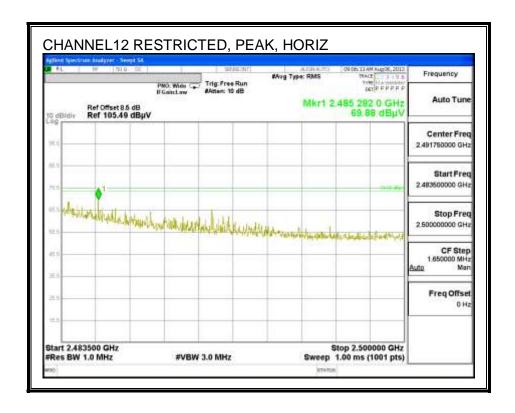
Frequency (GHz)	Meter Reading (dBuV)	Det	T344 Ant Factor [dB/m]	Amp/Cbl/Fl tr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
*1.91	43.91	PK	31.1	-24.8	50.21					401	Н
*2.933	42.89	PK	33	-23.8	52.09					301	Н
1.001	45.1	PK	27.7	-26.2	46.6	53.97	-7.37	74	-27.4	201	V
*2.653	42.74	PK	32.7	-23.9	51.54					201	V
9.319	36.57	PK	37	-25.5	48.07	53.97	-5.9	74	-25.93	100	V

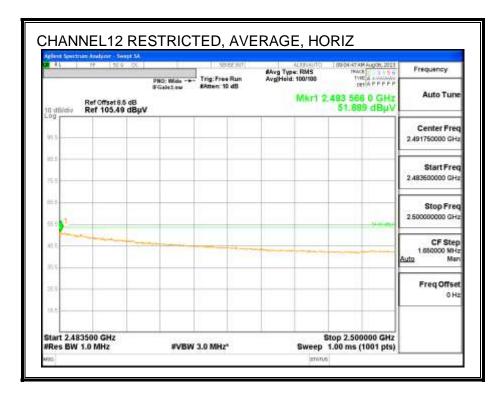
^{*}Not in Restricted Band

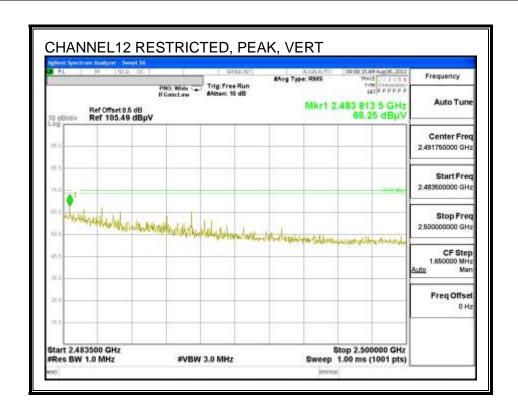
MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

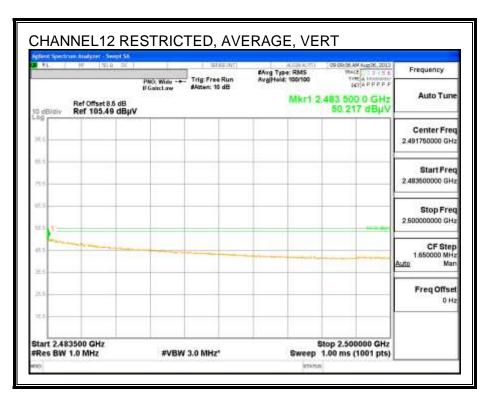
8.2.3. TX ABOVE 1 GHz 802.11N HT20 MODE IN THE 2.4 GHz BAND

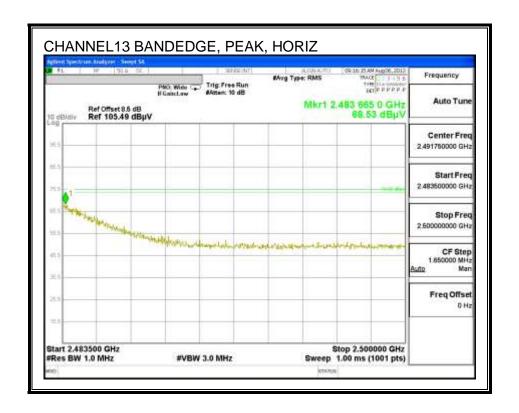
RESTRICTED BANDEDGE (LOW CHANNEL)

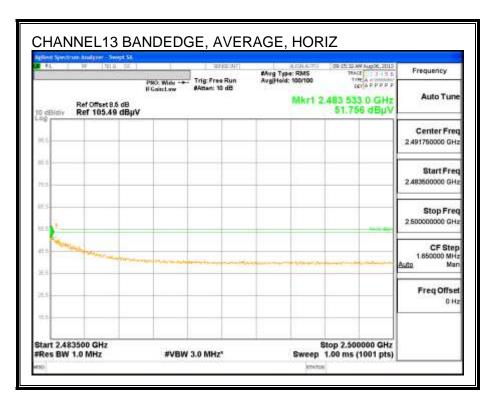


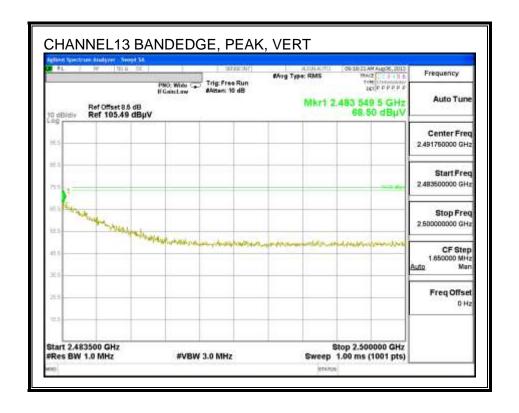


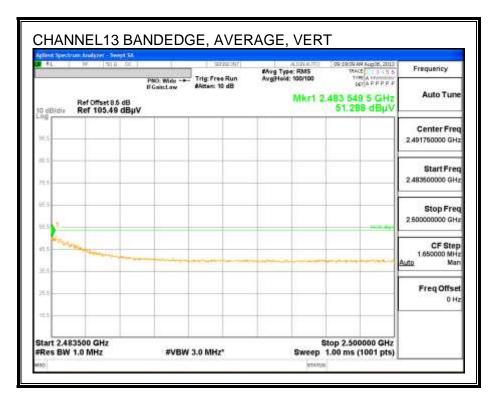


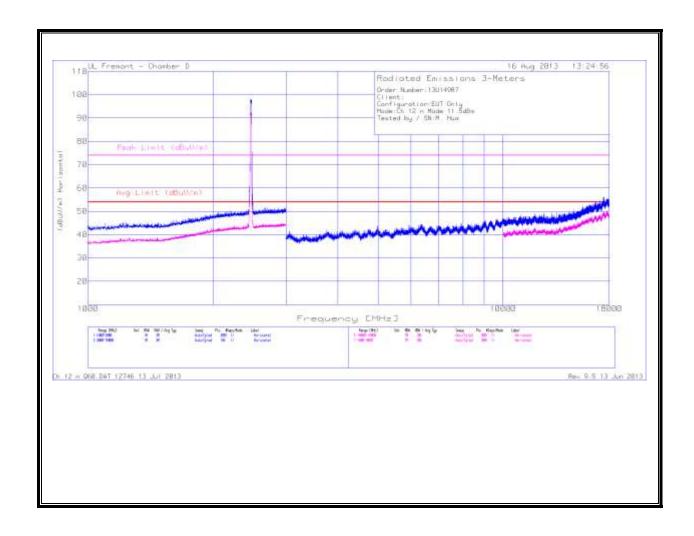


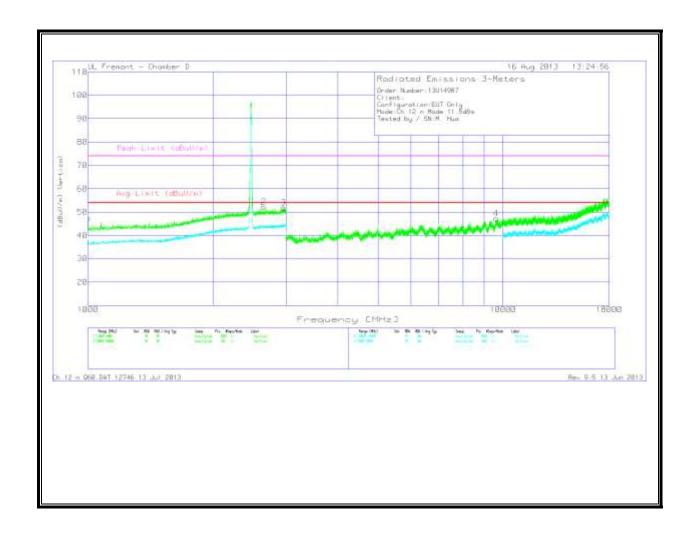








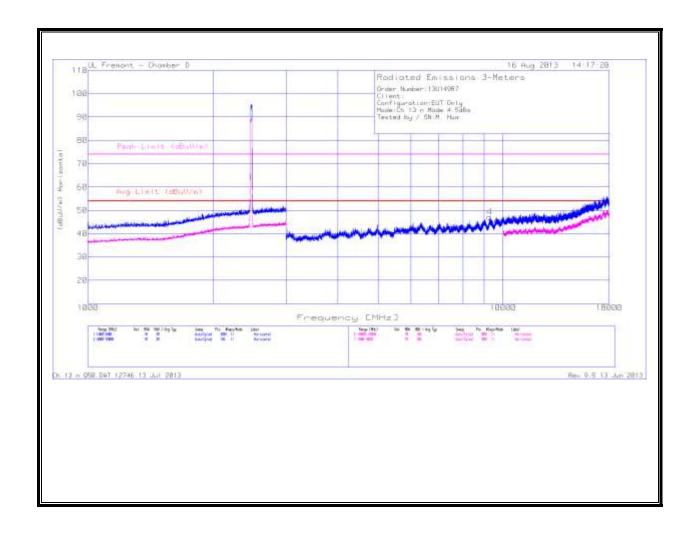


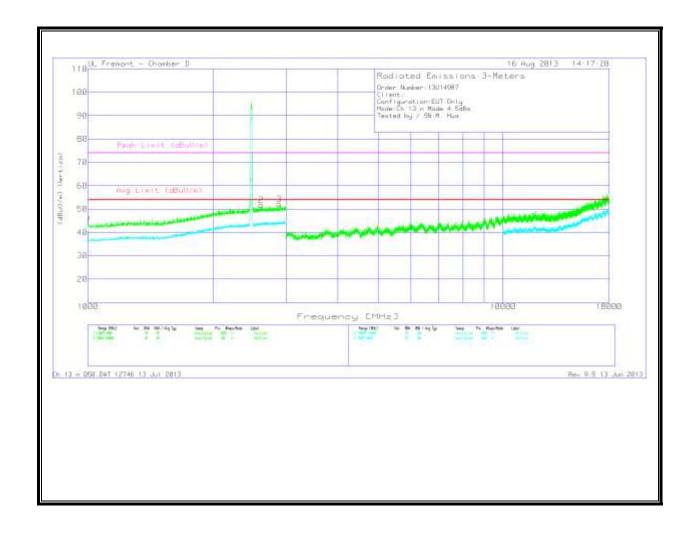


<u>DATA</u>

Frequency (GHz)	Meter Reading	Det	T344 Ant Factor [dB/m]	Amp/CbI/FI tr/Pad (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
	(dBuV)				(dBuV/m)						
1.001	45.99	PK	27.7	-26.2	47.49	53.97	-6.48	74	-26.51	201	V
*2.649	43.39	PK	32.7	-23.9	52.19					100	V
*2.959	42.61	PK	33.1	-23.8	51.91					401	V
*9.621	35.28	PK	37.3	-25.3	47.28					100	V

^{*}Not in Restricted Band





REPORT NO: 13U14987-17B DATE: SEPTEMBER 06, 2013 IC: 579C-E2644A, 579C-E2644B FCC ID: BCG-E2644A

<u>DATA</u>

Frequency (GHz)	Meter Reading (dBuV)	Det	T344 Ant Factor [dB/m]	Amp/Cbl/Fl tr/Pad (dB)	Corrected Reading (dBuV/m)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Height (cm)	Polarity
1.000	45.18	PK	27.7	-26.2	46.68	53.97	-7.29	74	-27.32	201	V
*2.611	43.1	PK	32.6	-24	51.7					201	V
2.889	42.99	PK	33	-23.9	52.09	53.97	-1.88	74	-21.91	201	V
2.889	30.53	MAv1	33	-23.9	39.63	53.97	-14.34	74	-34.37	161	V
*9.278	35.63	PK	36.9	-25.4	47.13					301	Н

^{*}Not in Restricted Band

MAv1 - KDB558074 v02 10.2.3.2/8.2.1 Option 1 Maximum RMS Average

END OF REPORT