

## 8. RADIATED TEST RESULTS

### 8.1. LIMITS AND PROCEDURE

#### LIMITS

FCC §15.205 and §15.209

IC RSS-210 Clause 2.6 (Transmitter)

IC RSS-GEN Clause 6 (Receiver)

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.

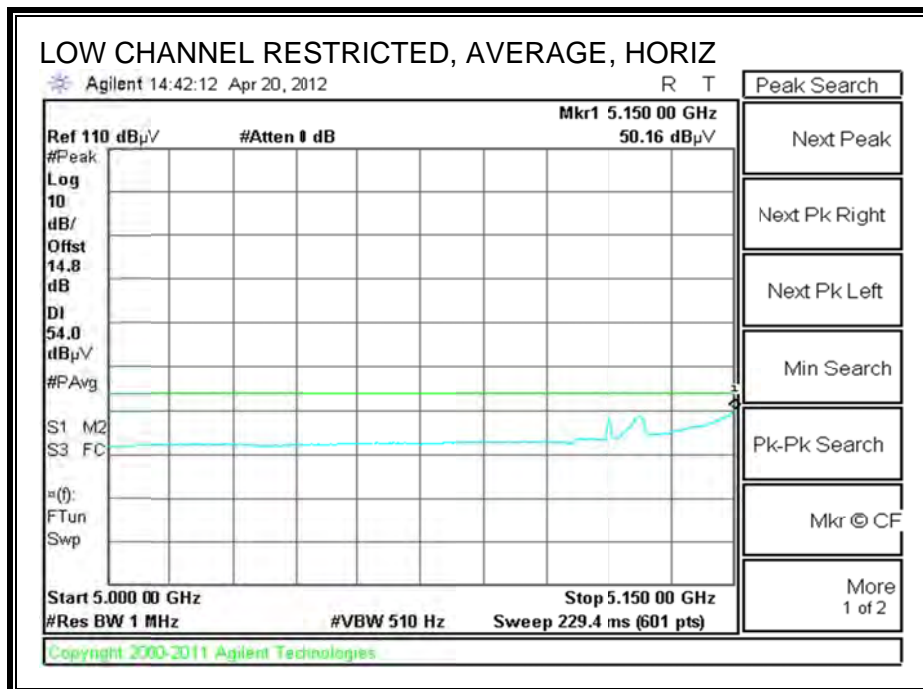
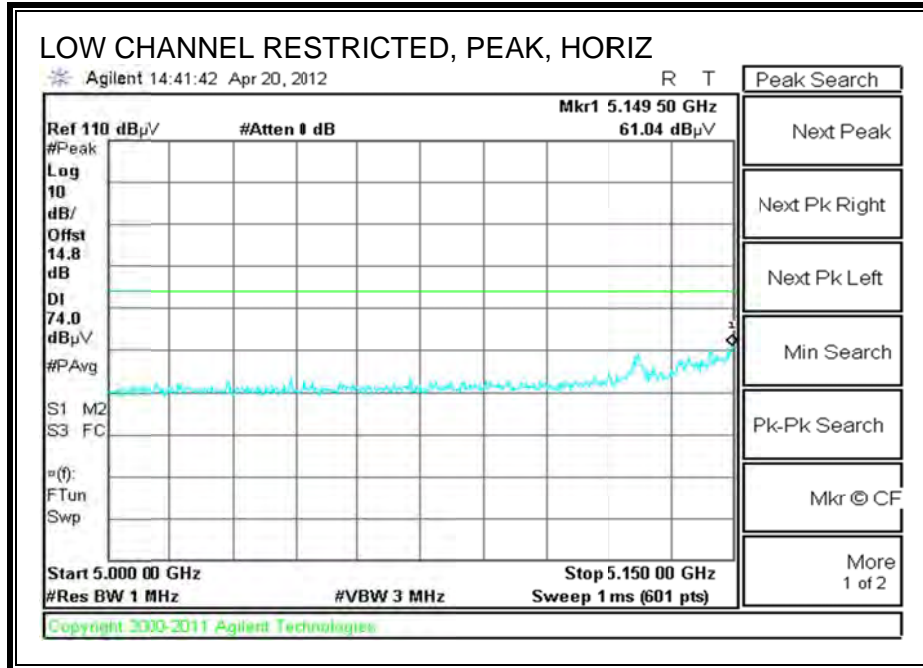
The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized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

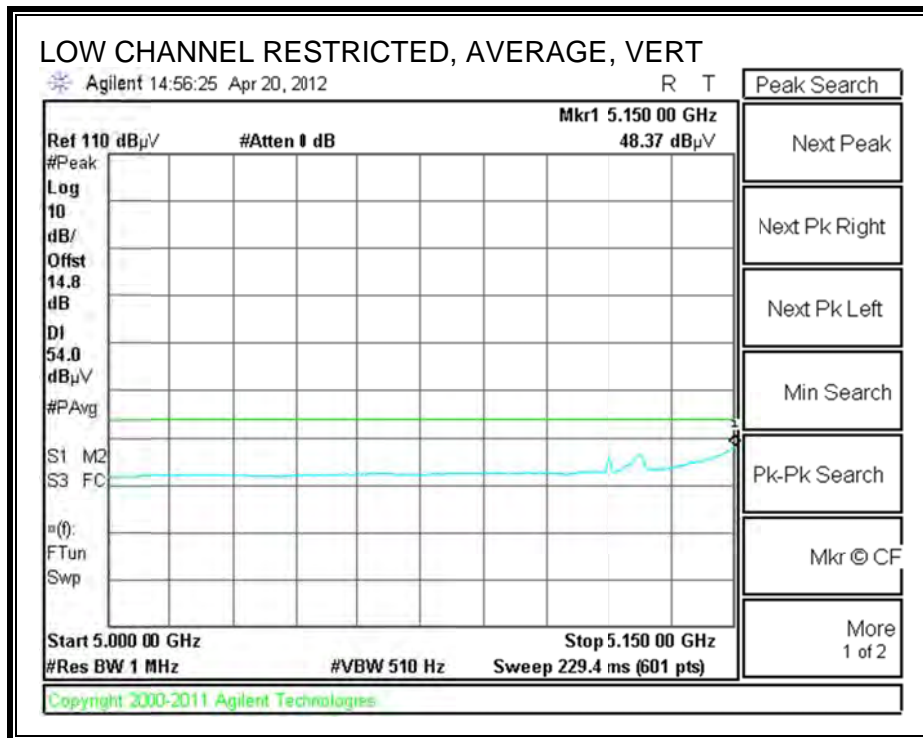
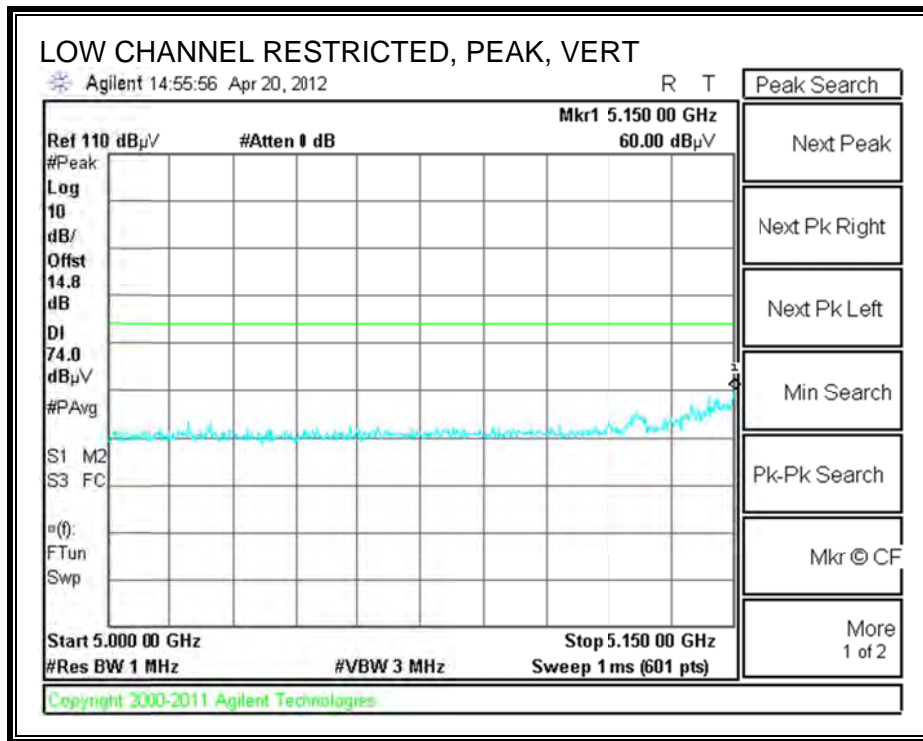
## 8.2. TRANSMITTER ABOVE 1 GHz

### 8.2.1. TX ABOVE 1 GHz 802.11a MODE IN THE 5.2 GHz BAND

#### STANDARD COVER

#### RESTRICTED BANDEDGE (LOW CHANNEL)





**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 5m Chamber

Test Engr: Chin Pang  
 Date: 04/20/12  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.407  
 Mode Oper: 5.2GHz band, a mode, TX  
 Configuration: EUT(Standard Cover) and AC adapter

f Measurement Frequency Amp Preamp Gain Average Field Strength Limit  
 Dist Distance to Antenna D Corr Distance Correct to 3 meters Peak Field Strength Limit  
 Read Analyzer Reading Avg Average Field Strength @ 3 m Margin vs. Average Limit  
 AF Antenna Factor Peak Calculated Peak Field Strength Margin vs. Peak Limit  
 CL Cable Loss HPF High Pass Filter

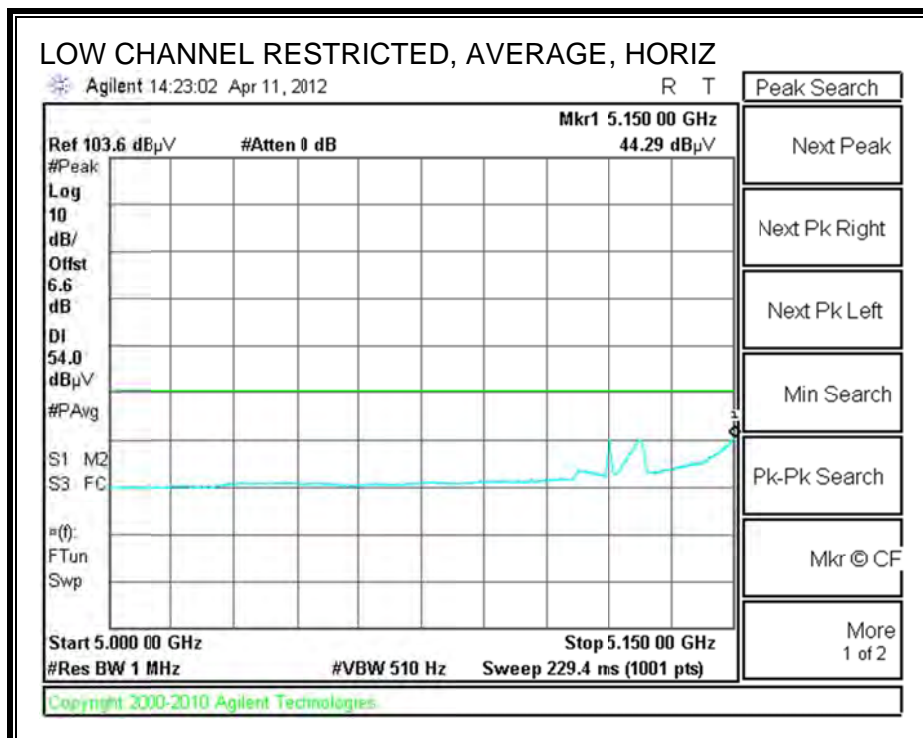
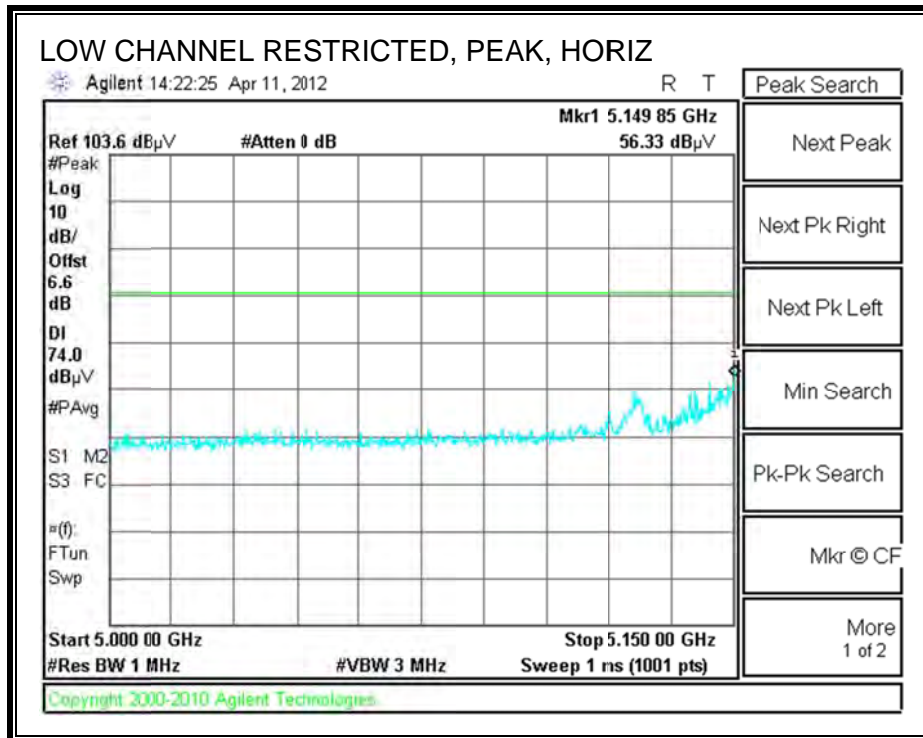
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Corr. dB	Limit dB	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
<b>Low Ch, 5180MHz</b>													
15.540	3.0	35.2	39.0	12.2	-34.0	0.0	0.7	53.2	74.0	-20.8	V	P	
15.540	3.0	23.6	39.0	12.2	-34.0	0.0	0.7	41.5	54.0	-12.5	V	A	
15.540	3.0	35.8	39.0	12.2	-34.0	0.0	0.7	53.7	74.0	-20.3	H	P	
15.540	3.0	23.6	39.0	12.2	-34.0	0.0	0.7	41.5	54.0	-12.5	H	A	
<b>Mid Ch, 5200MHz</b>													
15.600	3.0	35.6	38.8	12.2	-34.0	0.0	0.7	53.3	74.0	-20.7	V	P	
15.600	3.0	23.6	38.8	12.2	-34.0	0.0	0.7	41.4	54.0	-12.6	V	A	
15.600	3.0	35.3	38.8	12.2	-34.0	0.0	0.7	53.0	74.0	-21.0	H	P	
15.600	3.0	23.6	38.8	12.2	-34.0	0.0	0.7	41.4	54.0	-12.6	H	A	
<b>High Ch, 5240MHz</b>													
15.720	3.0	35.7	38.4	12.3	-34.0	0.0	0.7	53.1	74.0	-20.9	V	P	
15.720	3.0	23.6	38.4	12.3	-34.0	0.0	0.7	41.1	54.0	-12.9	V	A	
15.720	3.0	36.3	38.4	12.3	-34.0	0.0	0.7	53.7	74.0	-20.3	H	P	
15.720	3.0	23.6	38.4	12.3	-34.0	0.0	0.7	41.1	54.0	-12.9	H	A	

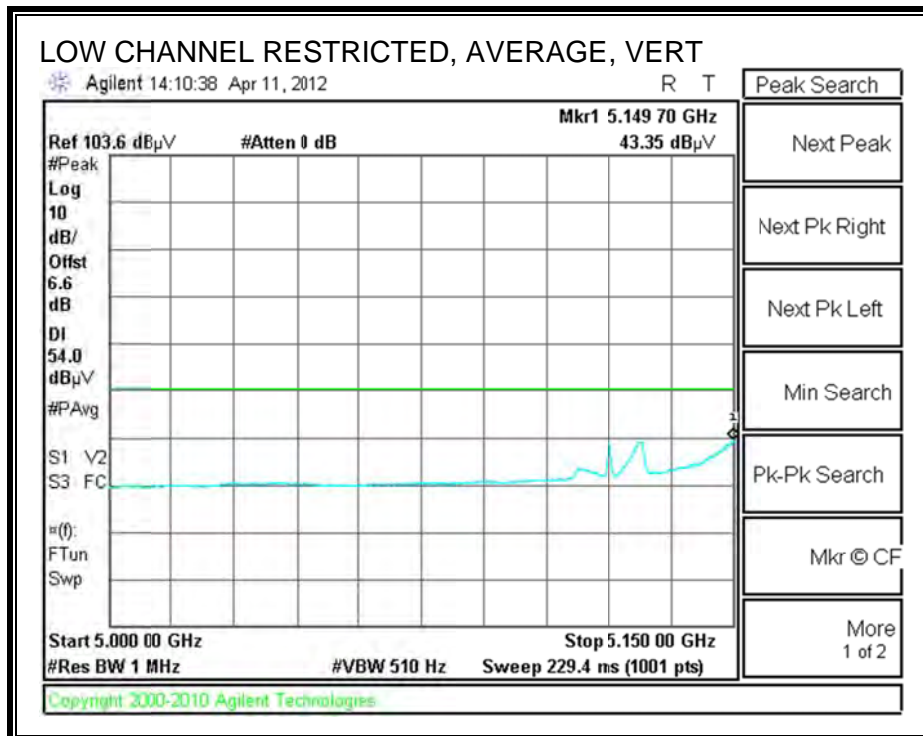
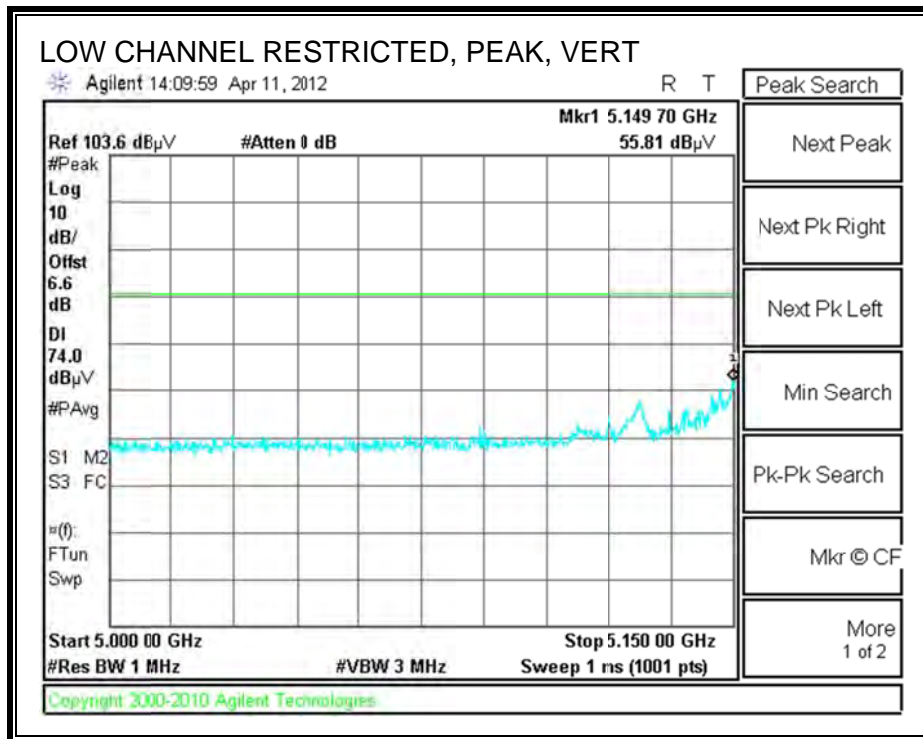
Rev. 4.12.7

Note: No other emissions were detected above the system noise floor.

**INDUCTIVE COVER**

**RESTRICTED BANDEDGE (LOW CHANNEL)**





**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 3m Chamber

Test Engr: Dennis Huang  
 Date: 04/11/12  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.205  
 Mode Oper: 802.11a Tx Mode (Inducting Cover)

f Measurement Frequency Amp Preamp Gain Average Field Strength Limit  
 Dist Distance to Antenna D Corr Distance Correct to 3 meters Peak Field Strength Limit  
 Read Analyzer Reading Avg Average Field Strength @ 3 m Margin vs. Average Limit  
 AF Antenna Factor Peak Calculated Peak Field Strength Margin vs. Peak Limit  
 CL Cable Loss HPF High Pass Filter

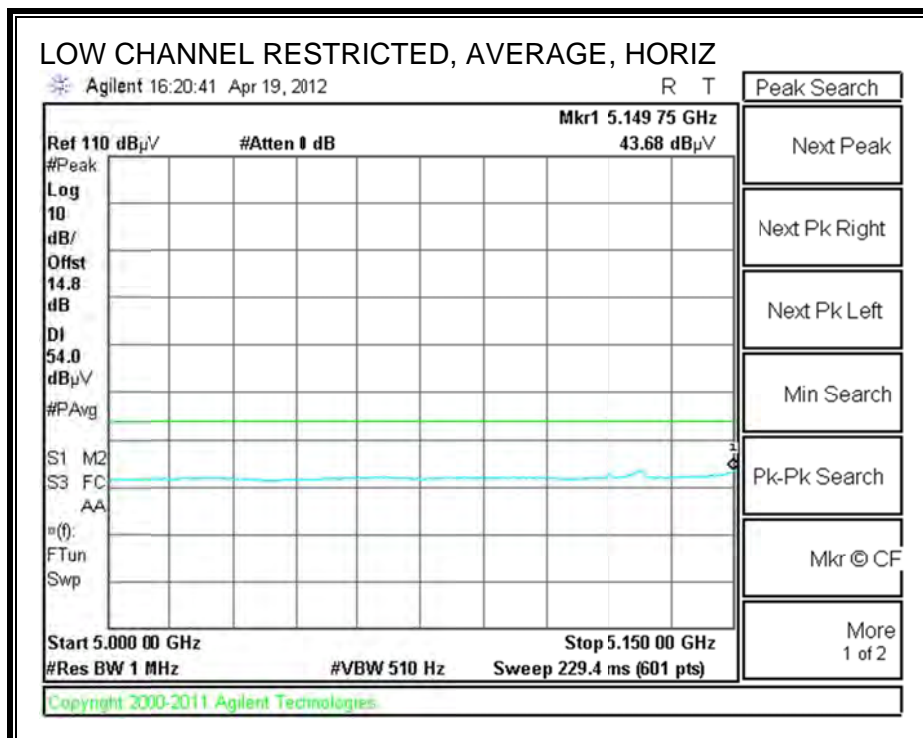
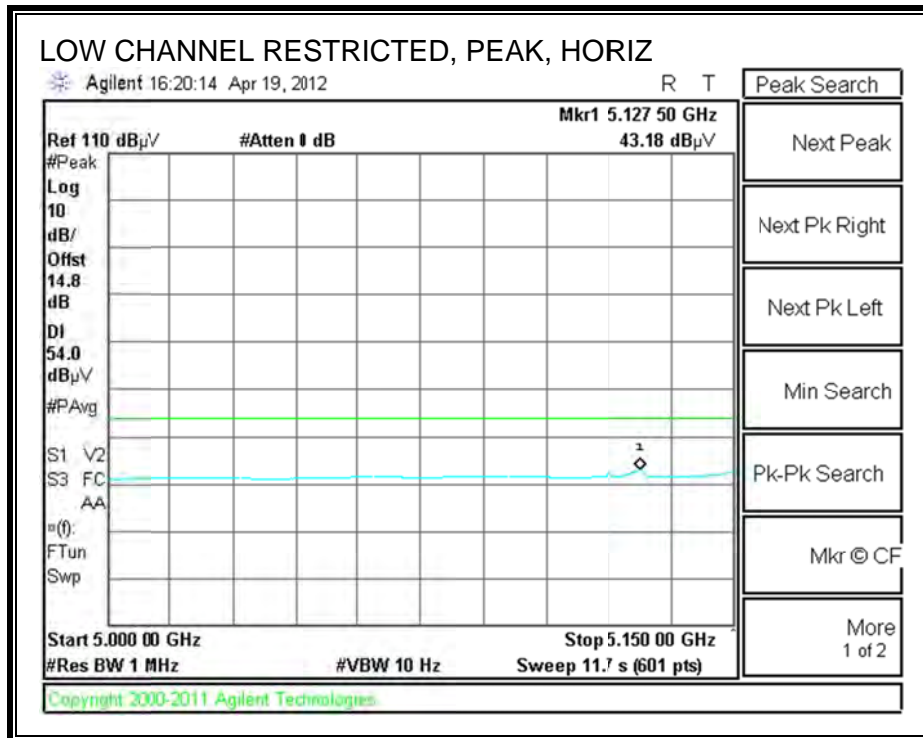
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
<b>Low Channel - 5180MHz</b>													
15.540	3.0	34.8	39.1	13.0	-31.9	0.0	0.7	55.6	74.0	-18.4	V	P	
15.540	3.0	24.9	39.1	13.0	-31.9	0.0	0.7	45.7	54.0	-8.3	V	A	
15.540	3.0	35.0	39.1	13.0	-31.9	0.0	0.7	55.8	74.0	-18.2	H	P	
15.540	3.0	24.9	39.1	13.0	-31.9	0.0	0.7	45.8	54.0	-8.2	H	A	
<b>Mid Channel - 5200MHz</b>													
15.600	3.0	34.0	38.8	13.0	-31.9	0.0	0.7	54.7	74.0	-19.3	V	P	
15.600	3.0	24.9	38.8	13.0	-31.9	0.0	0.7	45.5	54.0	-8.5	V	A	
15.600	3.0	33.7	38.8	13.0	-31.9	0.0	0.7	54.3	74.0	-19.7	H	P	
15.600	3.0	24.9	38.8	13.0	-31.9	0.0	0.7	45.6	54.0	-8.4	H	A	
<b>High Channel - 5240MHz</b>													
15.720	3.0	33.5	38.4	13.1	-31.9	0.0	0.7	53.8	74.0	-20.2	V	P	
15.720	3.0	24.7	38.4	13.1	-31.9	0.0	0.7	45.0	54.0	-9.0	V	A	
15.720	3.0	34.1	38.4	13.1	-31.9	0.0	0.7	54.4	74.0	-19.6	H	P	
15.720	3.0	24.7	38.4	13.1	-31.9	0.0	0.7	45.0	54.0	-9.0	H	A	

Rev. 4.1.2.7

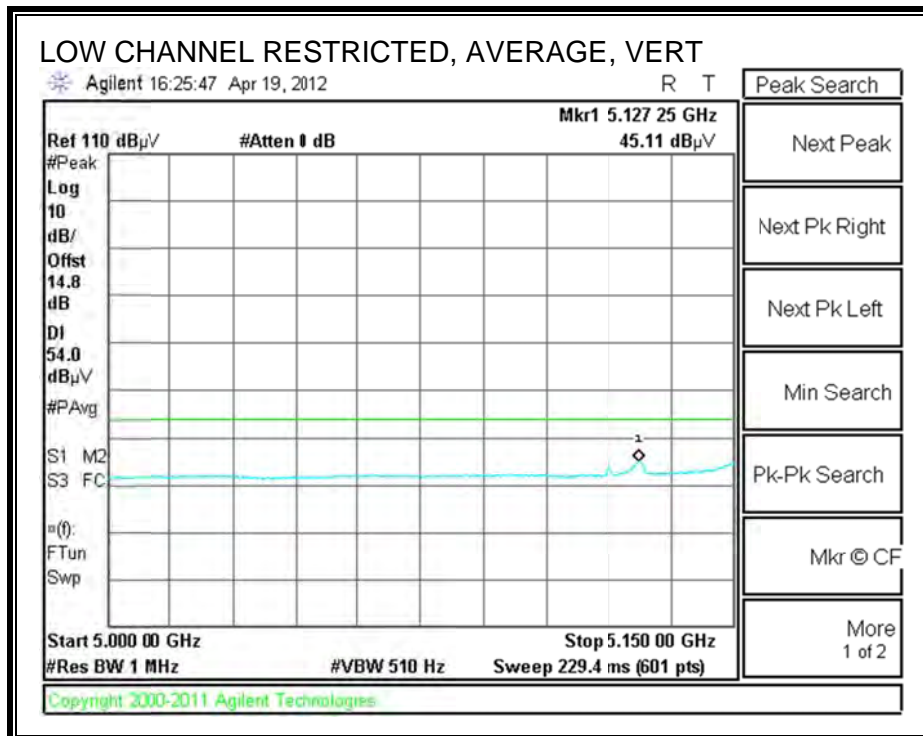
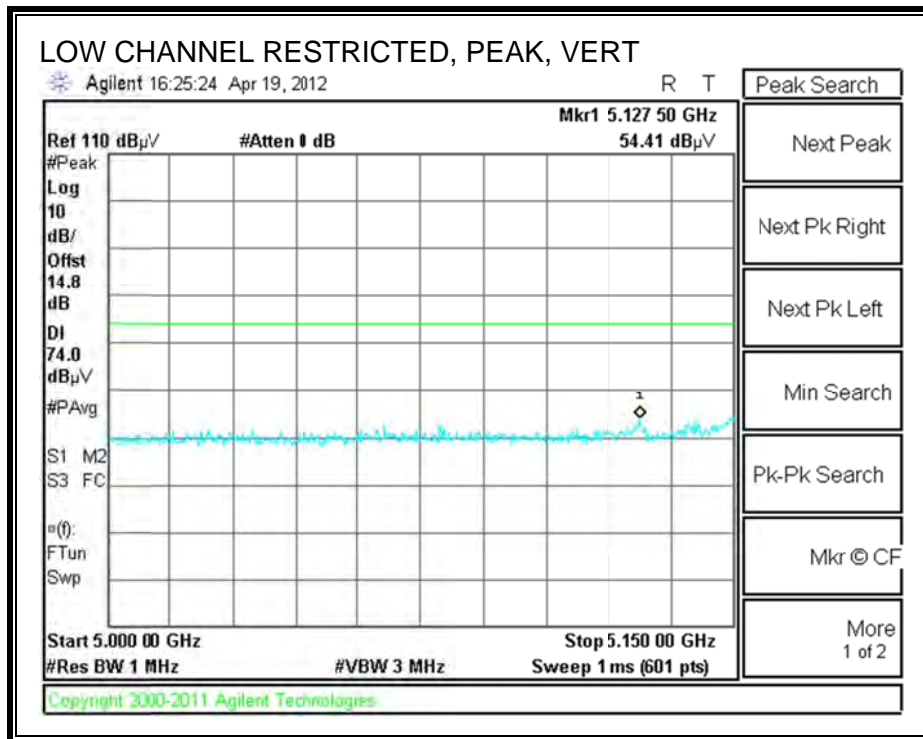
Note: No other emissions were detected above the system noise floor.

**ON INDUCTIVE CHARGER PAD**

**RESTRICTED BANDEDGE (LOW CHANNEL)**







**HARMONICS AND SPURIOUS EMISSIONS**

High Frequency Measurement													
Compliance Certification Services, Fremont 5m Chamber													
Test Engr:		Chin Pang											
Date:		04/20/11											
Project #:		12U14331											
Company:		LG											
Test Target:		FCC 15.407											
Configuration:		EUT (On Inductive Charging Pad)											
Mode Oper:		5.2GHz, a mode, TX (Worst Case)											
f	Measurement Frequency	Amp	Preamp Gain	Average Field Strength Limit									
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Peak Field Strength Limit									
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Margin vs. Average Limit									
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Margin vs. Peak Limit									
CL	Cable Loss	HPF	High Pass Filter										

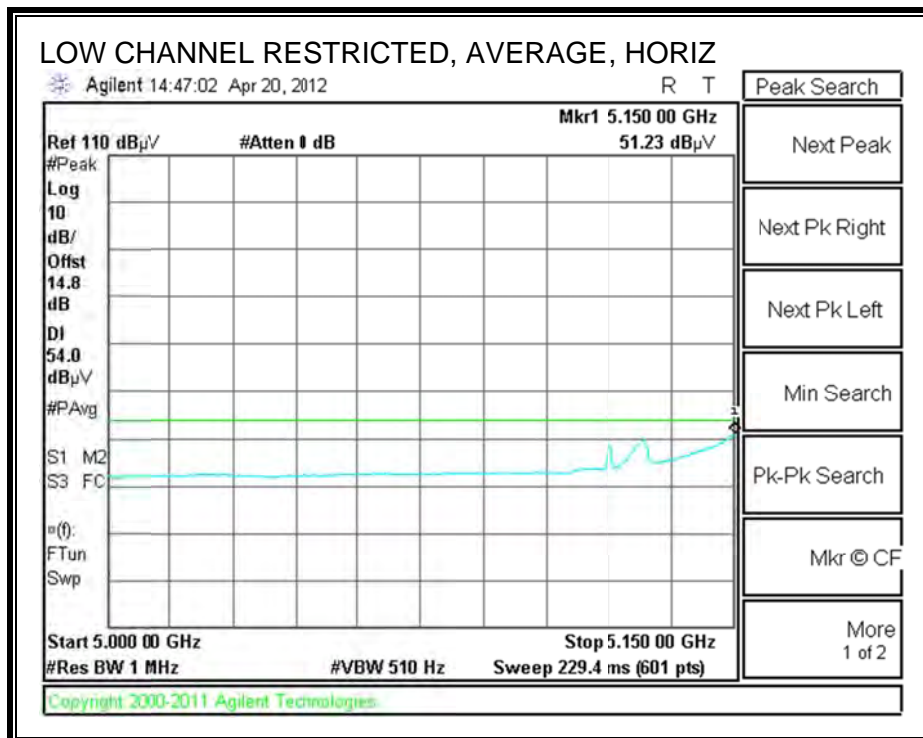
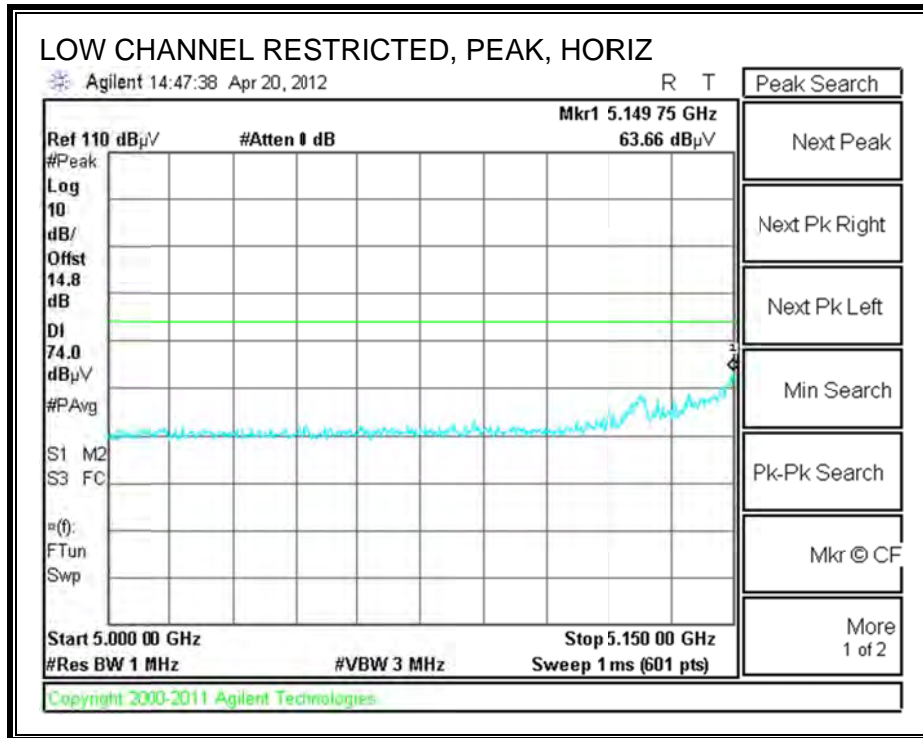
f	Dist	Read	AF	CL	Amp	D Corr	Filtr	Corr.	Limit	Margin	Ant. Pol.	Det.	Notes
GHz	(m)	dBuV	dB/m	dB	dB	dB	dB	dBuV/m	dBuV/m	dB	V/H	P/A/QP	
<b>Mid Ch, 5200MHz</b>													
15.600	3.0	35.5	38.8	12.2	-34.0	0.0	0.7	53.2	74.0	-20.8	H	P	
15.600	3.0	23.6	38.8	12.2	-34.0	0.0	0.7	41.4	54.0	-12.6	H	A	
15.600	3.0	36.3	38.8	12.2	-34.0	0.0	0.7	54.1	74.0	-19.9	V	P	
15.600	3.0	23.6	38.8	12.2	-34.0	0.0	0.7	41.3	54.0	-12.7	V	A	

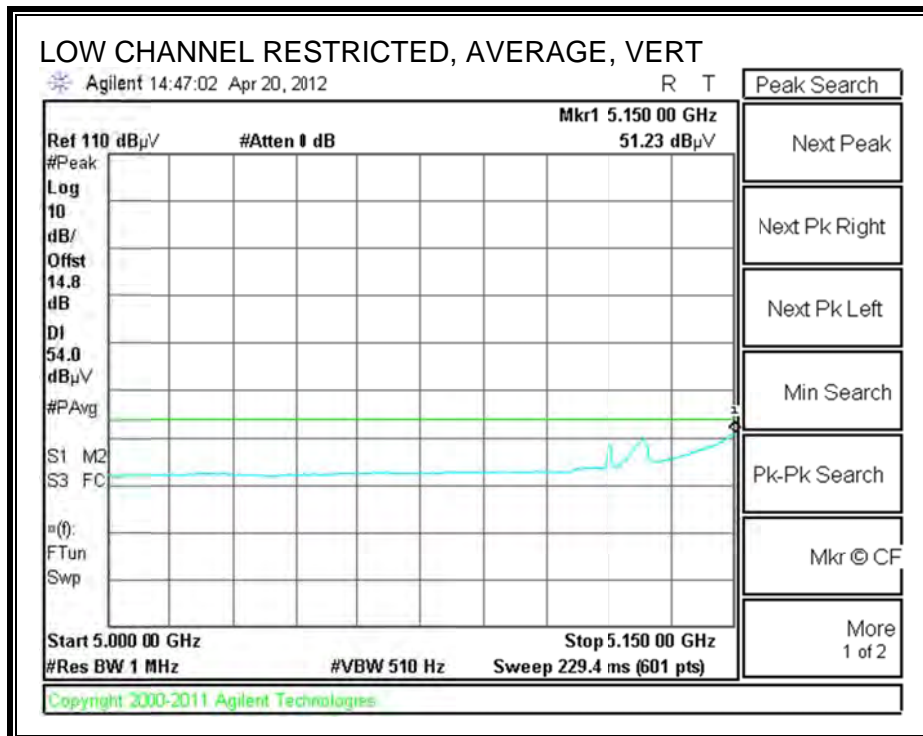
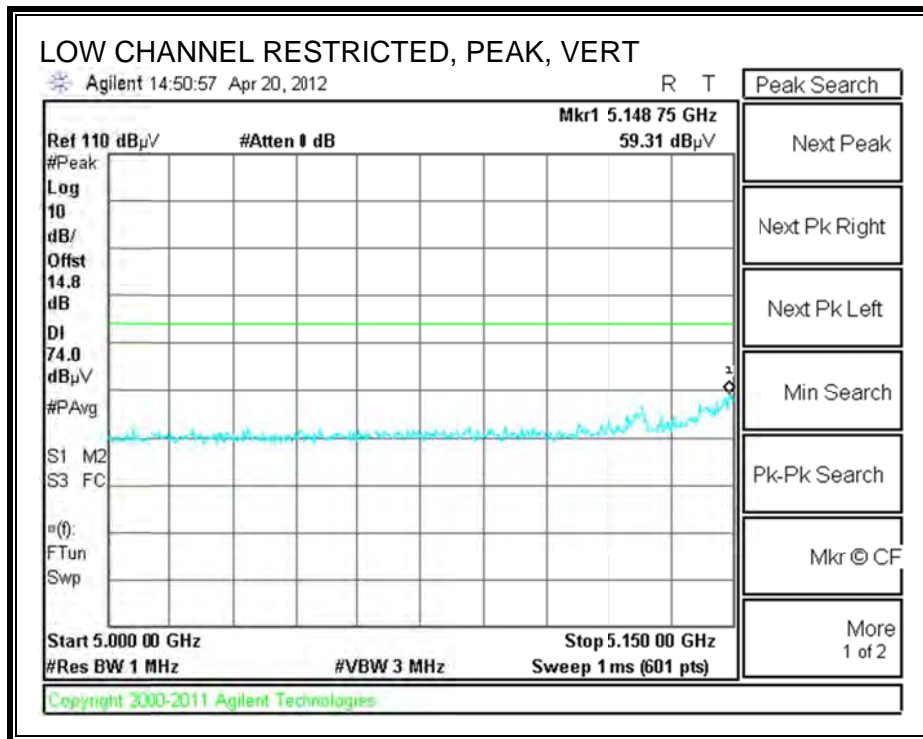
Rev. 4.1.2.7  
 Note: No other emissions were detected above the system noise floor.

### 8.2.2. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.2 GHz BAND

#### STANDARD COVER

#### RESTRICTED BANDEDGE (LOW CHANNEL)



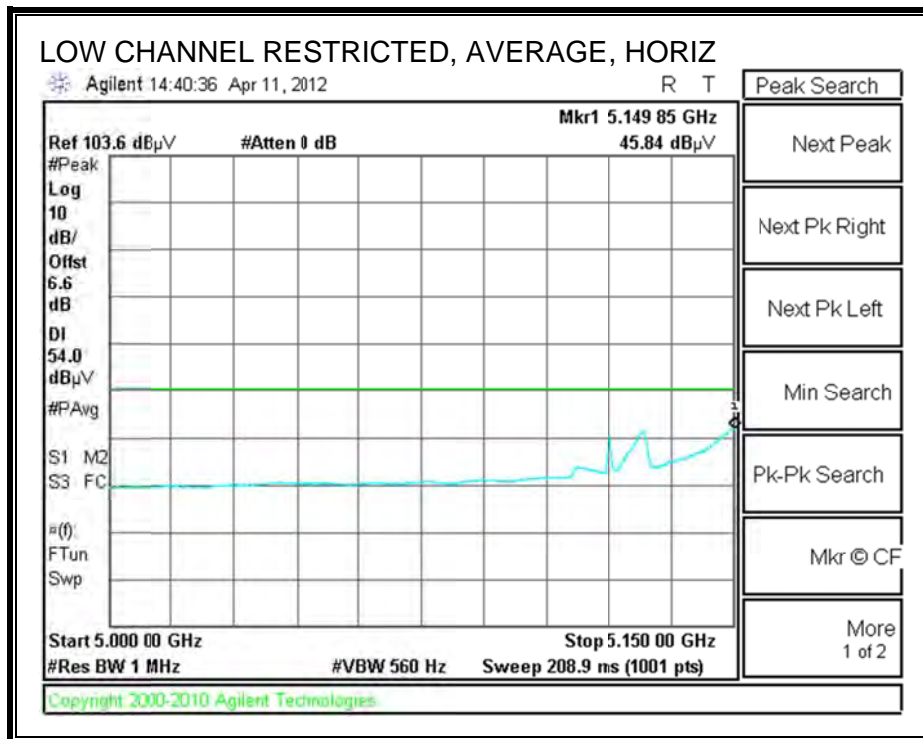
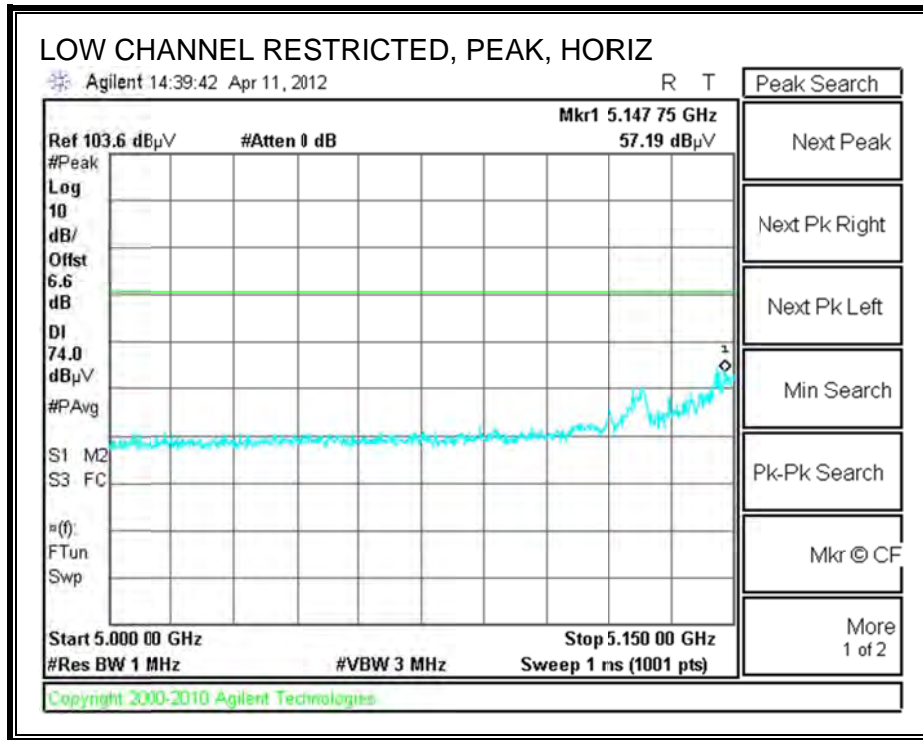


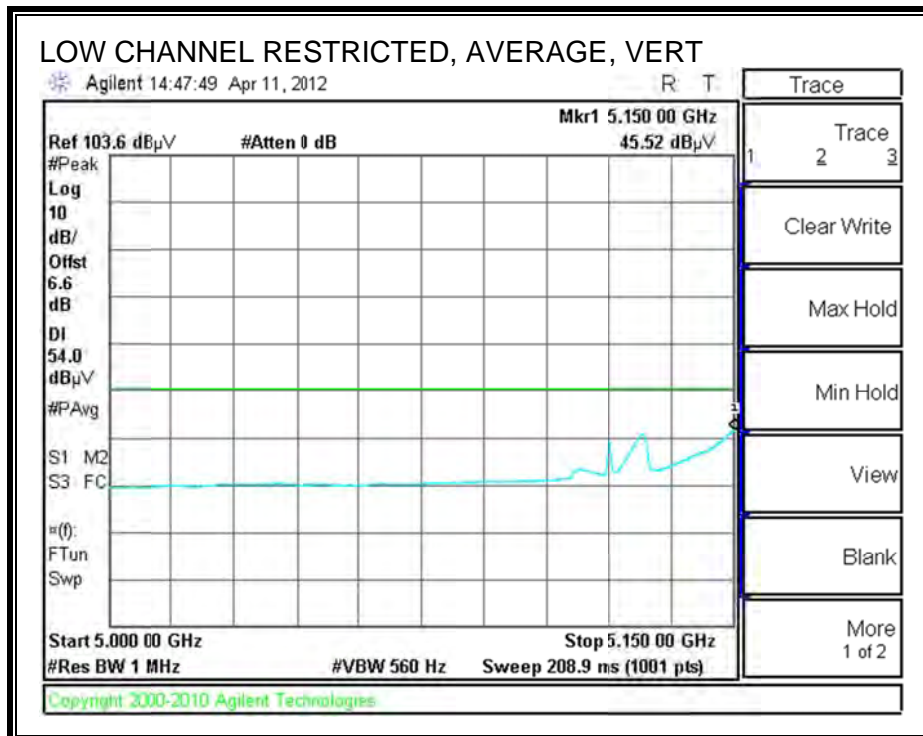
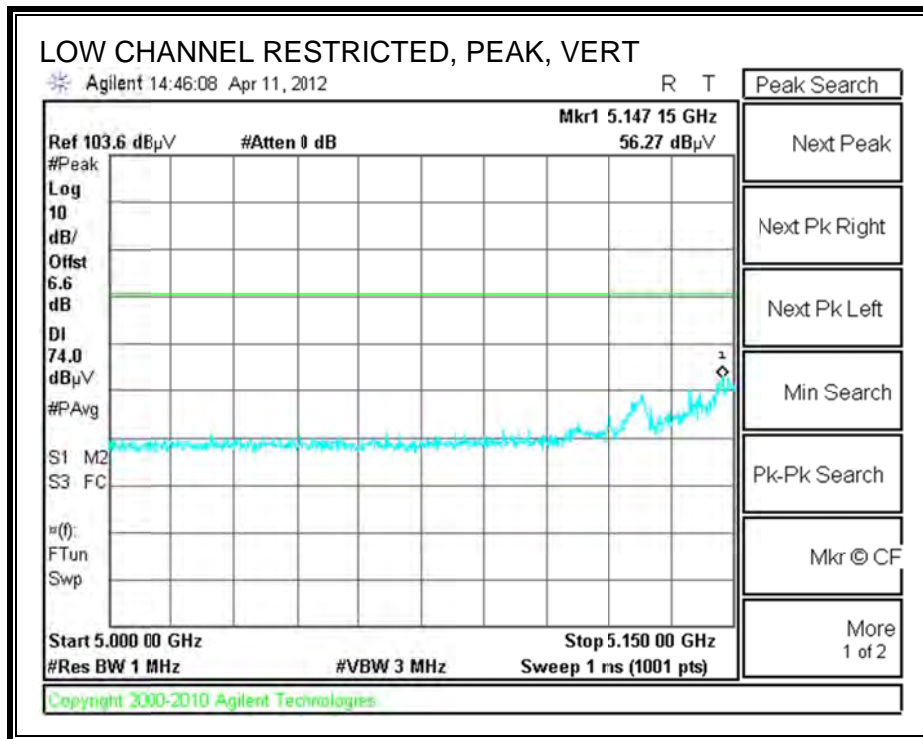
**HARMONICS AND SPURIOUS EMISSIONS**

High Frequency Measurement													
Compliance Certification Services, Fremont 5m Chamber													
Test Engr:		Chin Pang											
Date:		04/20/11											
Project #:		12U14331											
Company:		LG											
Test Target:		FCC 15.407											
Mode Oper:		5.2GHz band, HT20 mode, TX											
Configuration:		EUT(Standard Cover) and AC adapter											
f	Measurement Frequency			Amp	Preamp Gain			Average Field Strength Limit					
Dist	Distance to Antenna			D Corr	Distance Correct to 3 meters			Peak Field Strength Limit					
Read	Analyzer Reading			Avg	Average Field Strength @ 3 m			Margin vs. Average Limit					
AF	Antenna Factor			Peak	Calculated Peak Field Strength			Margin vs. Peak Limit					
CL	Cable Loss			HPF	High Pass Filter								
f	Dist	Read	AF	CL	Amp	D Corr	Filtr	Corr.	Limit	Margin	Ant. Pol.	Det.	Notes
GHz	(m)	dBuV	dB/m	dB	dB	dB	dB	dB	dBuV/m	dBuV/m	dB	V/H	P/A/QP
<b>Low Ch, 5180MHz</b>													
15.540	3.0	35.2	39.0	12.2	-34.0	0.0	0.7	53.1	74.0	-20.9	V	P	
15.540	3.0	23.6	39.0	12.2	-34.0	0.0	0.7	41.5	54.0	-12.5	V	A	
15.540	3.0	36.2	39.0	12.2	-34.0	0.0	0.7	54.2	74.0	-19.8	H	P	
15.540	3.0	23.6	39.0	12.2	-34.0	0.0	0.7	41.6	54.0	-12.4	H	A	
<b>Mid Ch, 5200MHz</b>													
15.600	3.0	35.4	38.8	12.2	-34.0	0.0	0.7	53.2	74.0	-20.8	V	P	
15.600	3.0	23.6	38.8	12.2	-34.0	0.0	0.7	41.3	54.0	-12.7	V	A	
15.600	3.0	36.1	38.8	12.2	-34.0	0.0	0.7	53.8	74.0	-20.2	H	P	
15.600	3.0	23.6	38.8	12.2	-34.0	0.0	0.7	41.3	54.0	-12.7	H	A	
<b>High Ch, 5240MHz</b>													
15.720	3.0	35.9	38.4	12.3	-34.0	0.0	0.7	53.4	74.0	-20.6	V	P	
15.720	3.0	23.6	38.4	12.3	-34.0	0.0	0.7	41.0	54.0	-13.0	V	A	
15.720	3.0	36.0	38.4	12.3	-34.0	0.0	0.7	53.4	74.0	-20.6	H	P	
15.720	3.0	23.6	38.4	12.3	-34.0	0.0	0.7	41.0	54.0	-13.0	H	A	
Rev. 4.1.2.7													
Note: No other emissions were detected above the system noise floor.													

**INDUCTIVE COVER**

**RESTRICTED BANDEDGE (LOW CHANNEL)**





**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 5m Chamber

Test Engr: Chin Pang  
 Date: 04/20/12  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.407  
 Mode Oper: 5.2GHz band, HT20 mode, TX  
 Configuration: EUT(Inductive Cover) and AC adapter

f Measurement Frequency Amp Preamp Gain Average Field Strength Limit  
 Dist Distance to Antenna D Corr Distance Correct to 3 meters Peak Field Strength Limit  
 Read Analyzer Reading Avg Average Field Strength @ 3 m Margin vs. Average Limit  
 AF Antenna Factor Peak Calculated Peak Field Strength Margin vs. Peak Limit  
 CL Cable Loss HPF High Pass Filter

f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Corr. dB	Limit dB	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
<b>Low Ch, 5180MHz</b>													
15.540	3.0	36.3	39.0	12.2	-34.0	0.0	0.7	54.2	74.0	-19.8	H	P	
15.540	3.0	23.6	39.0	12.2	-34.0	0.0	0.7	41.5	54.0	-12.5	H	A	
15.540	3.0	37.0	39.0	12.2	-34.0	0.0	0.7	54.9	74.0	-19.1	V	P	
15.540	3.0	23.6	39.0	12.2	-34.0	0.0	0.7	41.5	54.0	-12.5	V	A	
<b>Mid Ch, 5200MHz</b>													
15.600	3.0	35.3	38.8	12.2	-34.0	0.0	0.7	53.0	74.0	-21.0	H	P	
15.600	3.0	23.5	38.8	12.2	-34.0	0.0	0.7	41.2	54.0	-12.8	H	A	
15.600	3.0	35.8	38.8	12.2	-34.0	0.0	0.7	53.6	74.0	-20.4	V	P	
15.600	3.0	23.5	38.8	12.2	-34.0	0.0	0.7	41.2	54.0	-12.8	V	A	
<b>High Ch, 5240MHz</b>													
15.720	3.0	36.2	38.4	12.3	-34.0	0.0	0.7	53.7	74.0	-20.3	H	P	
15.720	3.0	23.6	38.4	12.3	-34.0	0.0	0.7	41.1	54.0	-13.0	H	A	
15.720	3.0	36.0	38.4	12.3	-34.0	0.0	0.7	53.4	74.0	-20.6	V	P	
15.720	3.0	23.6	38.4	12.3	-34.0	0.0	0.7	41.0	54.0	-13.0	V	A	

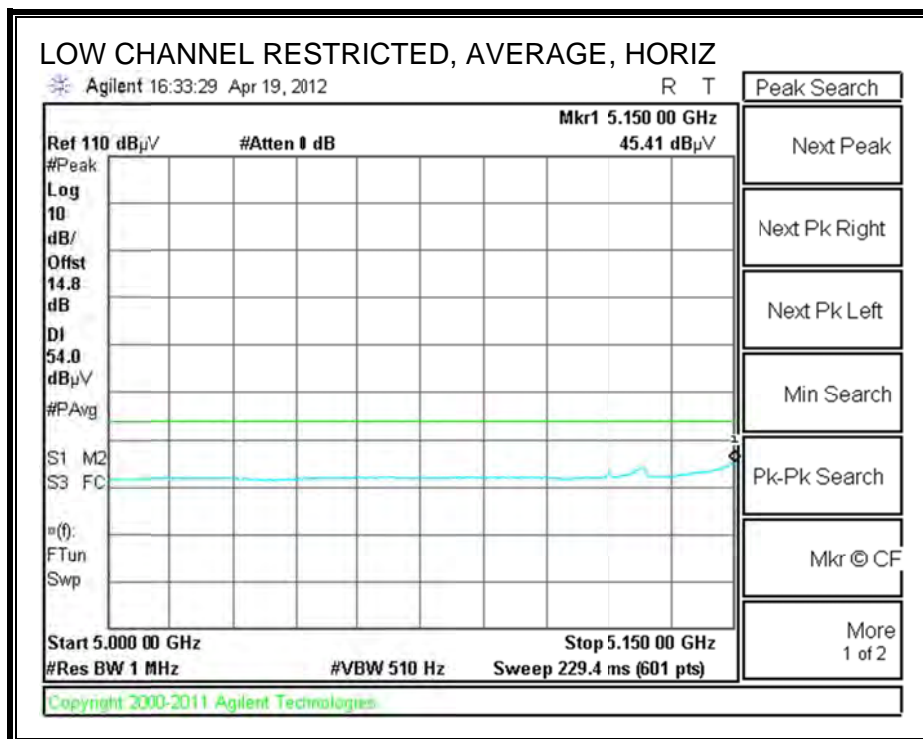
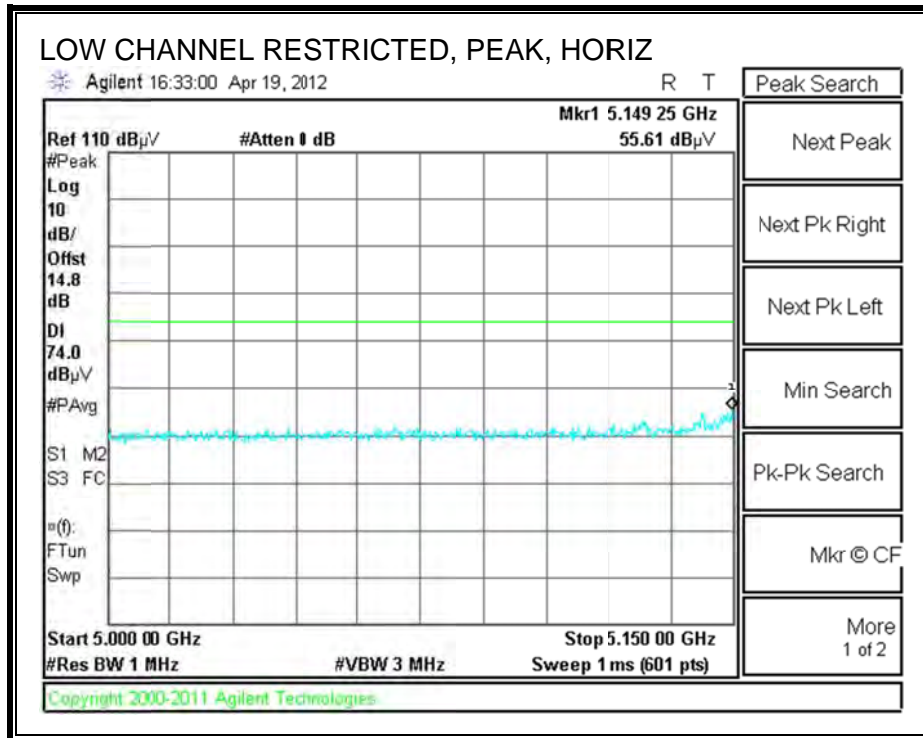
Rev. 4.12.7

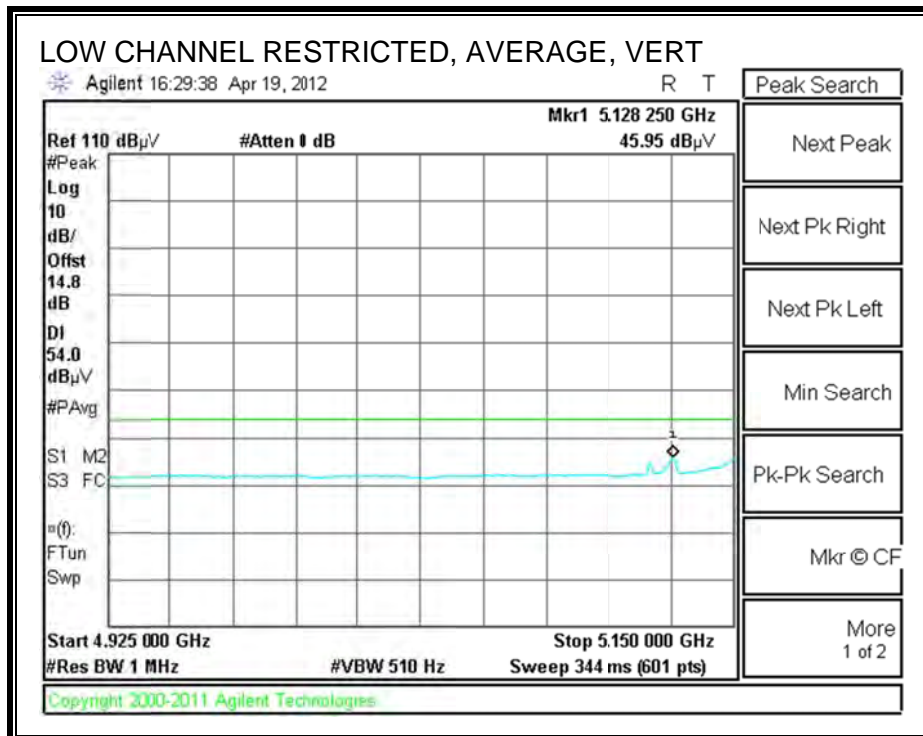
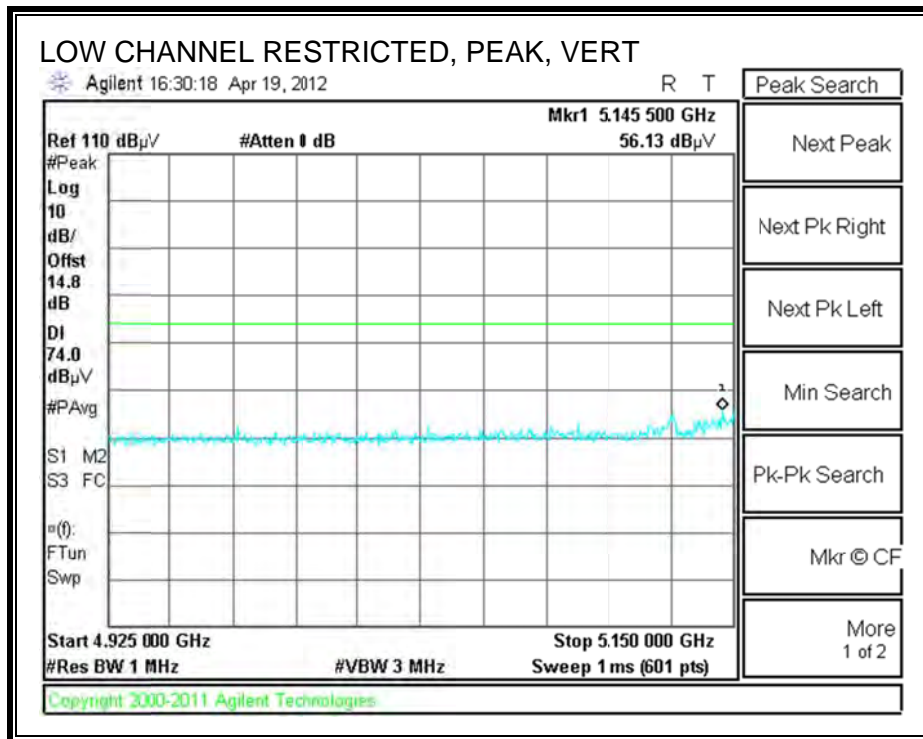
Note: No other emissions were detected above the system noise floor.



**ON INDUCTIVE CHARGER PAD**

**RESTRICTED BANDEDGE (LOW CHANNEL)**





**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 5m Chamber

Test Engr: Chin Pang  
 Date: 04/20/12  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.407  
 Configuration: EUT (On Inductive Charging Pad)  
 Mode Oper: 5.2GHz, HT20, TX (Worst Case)

f Measurement Frequency Amp Preamp Gain Average Field Strength Limit  
 Dist Distance to Antenna D Corr Distance Correct to 3 meters Peak Field Strength Limit  
 Read Analyzer Reading Avg Average Field Strength @ 3 m Margin vs. Average Limit  
 AF Antenna Factor Peak Calculated Peak Field Strength Margin vs. Peak Limit  
 CL Cable Loss HPF High Pass Filter

f	Dist	Read	AF	CL	Amp	D Corr	Fltr	Corr.	Limit	Margin	Ant. Pol.	Det.	Notes
GHz	(m)	dBuV	dB/m	dB	dB	dB	dB	dBuV/m	dBuV/m	dB	V/H	P/A/QP	
<b>Mid Ch, 5200MHz</b>													
15.600	3.0	35.5	38.8	12.2	-34.0	0.0	0.7	53.3	74.0	-20.7	V	P	
15.600	3.0	23.4	38.8	12.2	-34.0	0.0	0.7	41.2	54.0	-12.8	V	A	
15.600	3.0	35.6	38.8	12.2	-34.0	0.0	0.7	53.3	74.0	-20.7	H	P	
15.600	3.0	23.4	38.8	12.2	-34.0	0.0	0.7	41.2	54.0	-12.8	H	A	

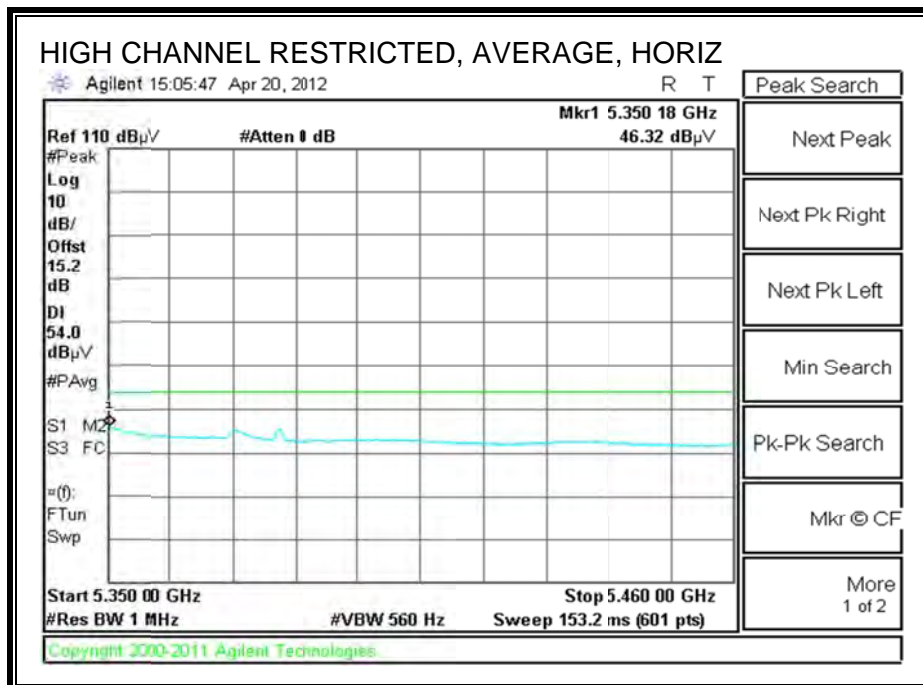
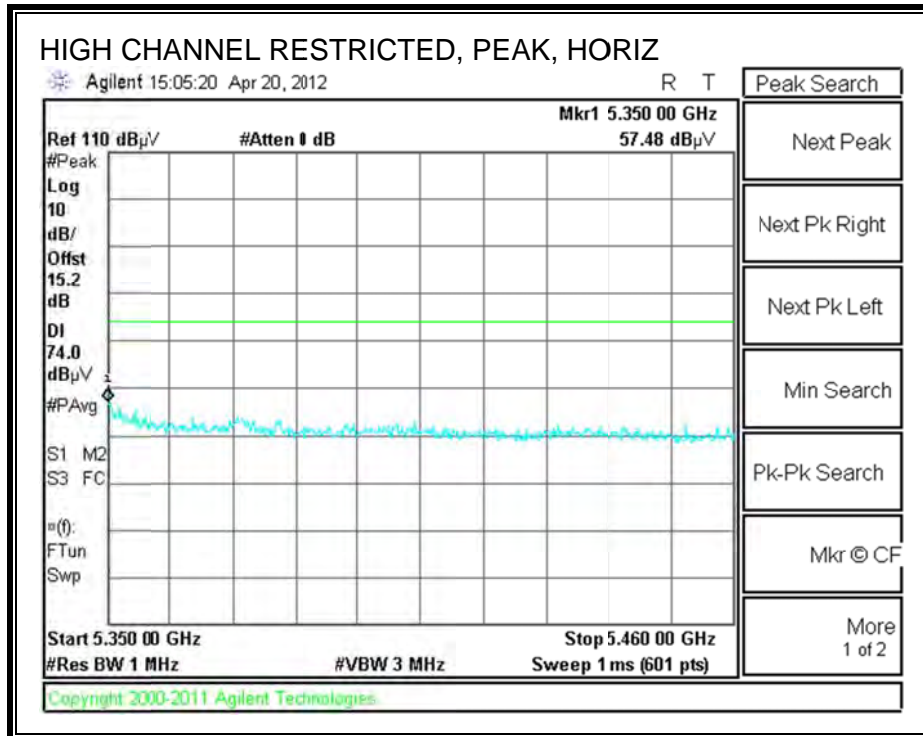
Rev. 4.1.2.7

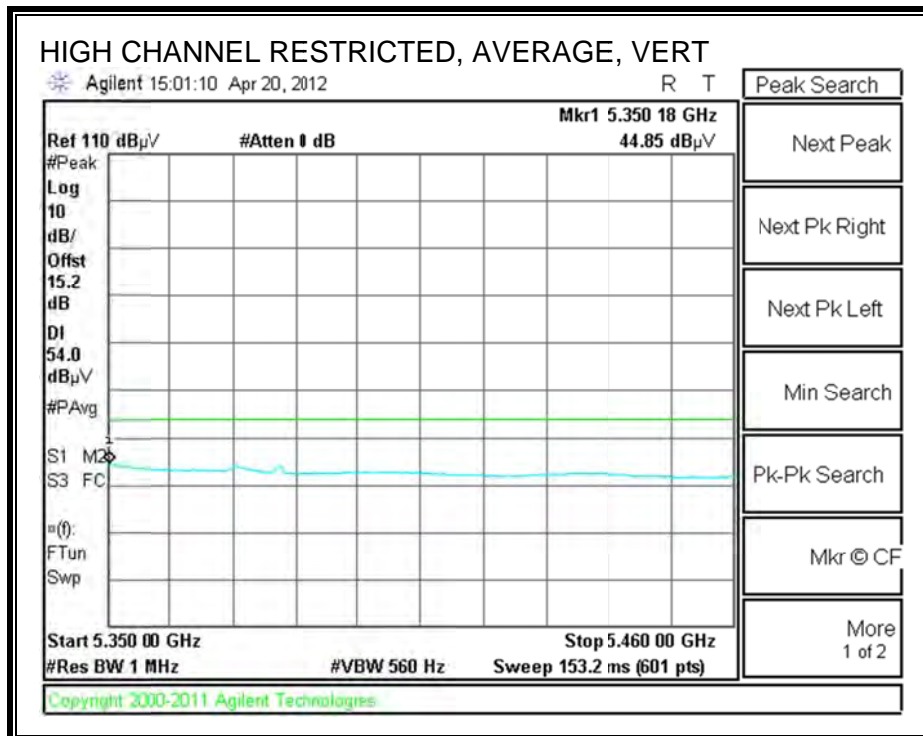
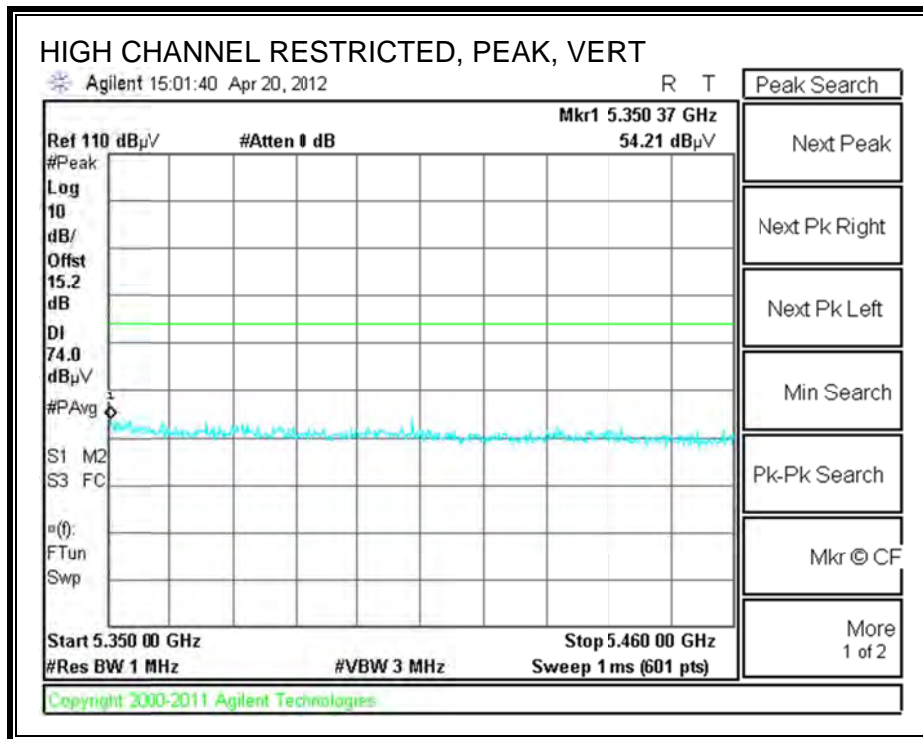
Note: No other emissions were detected above the system noise floor.

### 8.2.3. 802.11a MODE IN THE 5.3 GHz BAND

#### STANDARD COVER

#### RESTRICTED BANEDGE (HIGH CHANNEL)





**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 5m Chamber

Test Engr: Chin Pang  
 Date: 04/20/12  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.407  
 Mode Oper: 5.3GHz band, a mode, TX  
 Configuration: EUT(Standard Cover) and AC adapter

f Measurement Frequency Amp Preamp Gain Average Field Strength Limit  
 Dist Distance to Antenna D Corr Distance Correct to 3 meters Peak Field Strength Limit  
 Read Analyzer Reading Avg Average Field Strength @ 3 m Margin vs. Average Limit  
 AF Antenna Factor Peak Calculated Peak Field Strength Margin vs. Peak Limit  
 CL Cable Loss HPF High Pass Filter

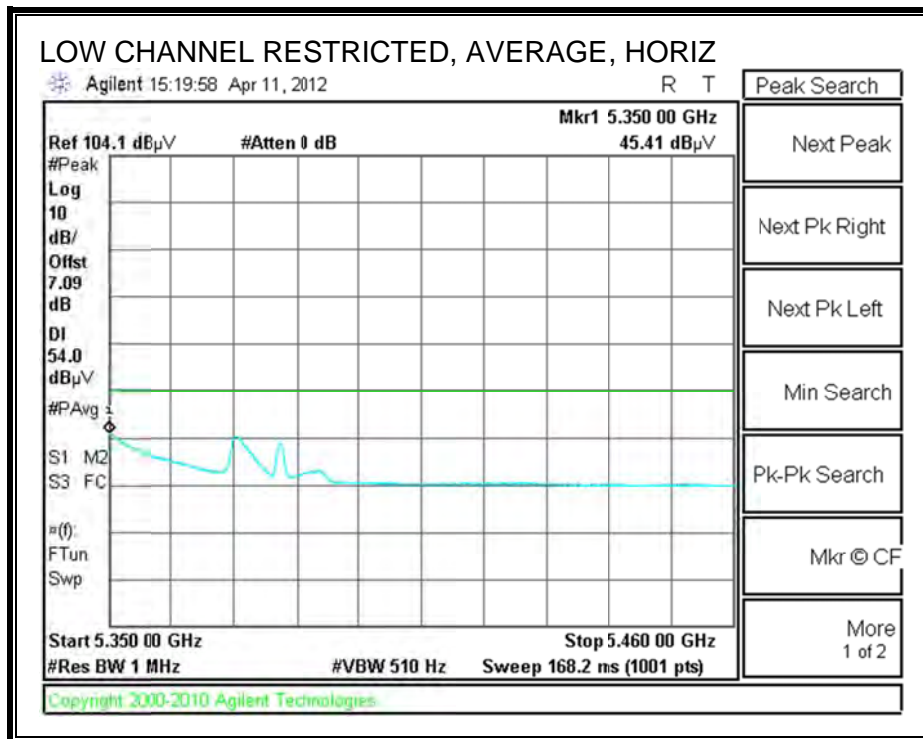
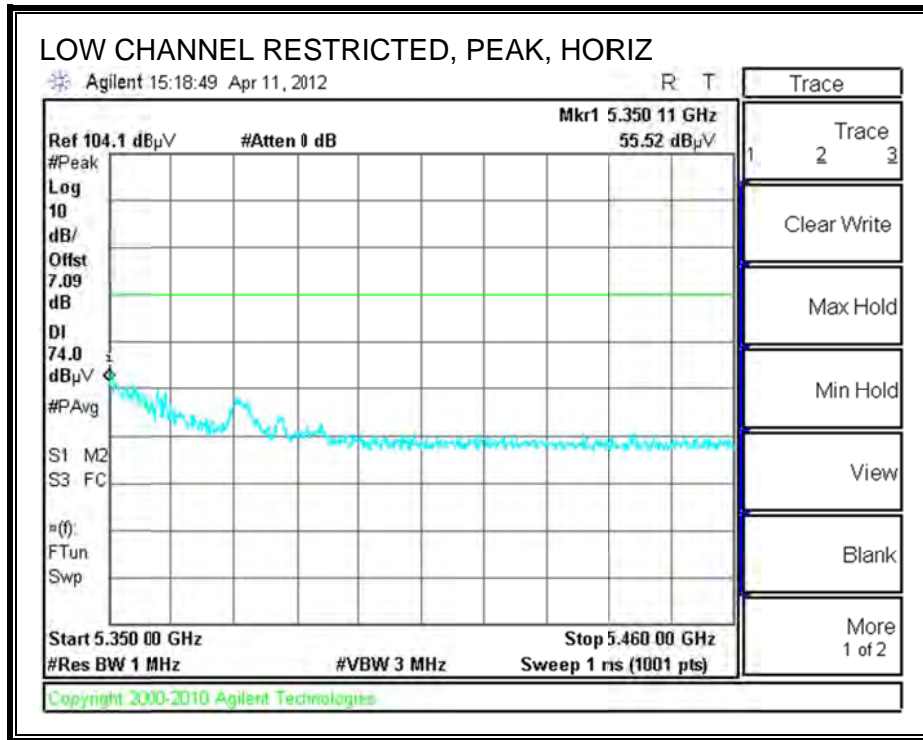
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Corr. dB	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
<b>Low Ch. 5260MHz</b>													
15.780	3.0	35.7	38.2	12.3	-33.9	0.0	0.7	53.0	74.0	-21.0	H	P	
15.780	3.0	23.4	38.2	12.3	-33.9	0.0	0.7	40.7	54.0	-13.3	H	A	
15.780	3.0	35.5	38.2	12.3	-33.9	0.0	0.7	52.8	74.0	-21.2	V	P	
15.780	3.0	23.4	38.2	12.3	-33.9	0.0	0.7	40.7	54.0	-13.3	V	A	
<b>Mid Ch. 5300MHz</b>													
10.600	3.0	34.0	38.3	9.7	-35.7	0.0	0.8	47.0	74.0	-27.0	H	P	
10.600	3.0	25.1	38.3	9.7	-35.7	0.0	0.8	38.1	54.0	-15.9	H	A	
15.900	3.0	35.6	37.8	12.4	-33.9	0.0	0.7	52.6	74.0	-21.4	H	P	
15.900	3.0	22.9	37.8	12.4	-33.9	0.0	0.7	39.9	54.0	-14.1	H	A	
10.600	3.0	35.7	38.3	9.7	-35.7	0.0	0.8	48.7	74.0	-25.3	V	P	
10.600	3.0	25.1	38.3	9.7	-35.7	0.0	0.8	38.1	54.0	-15.9	V	A	
15.900	3.0	34.9	37.8	12.4	-33.9	0.0	0.7	51.9	74.0	-22.1	V	P	
15.900	3.0	22.9	37.8	12.4	-33.9	0.0	0.7	39.9	54.0	-14.1	V	A	
<b>High Ch. 5320MHz</b>													
10.640	3.0	34.1	38.3	9.8	-35.7	0.0	0.8	47.2	74.0	-26.8	H	P	
10.640	3.0	25.6	38.3	9.8	-35.7	0.0	0.8	38.7	54.0	-15.3	H	A	
15.960	3.0	35.7	37.6	12.4	-33.9	0.0	0.7	52.5	74.0	-21.5	H	P	
15.960	3.0	23.1	37.6	12.4	-33.9	0.0	0.7	39.9	54.0	-14.1	H	A	
10.640	3.0	34.2	38.3	9.8	-35.7	0.0	0.8	47.3	74.0	-26.7	V	P	
10.640	3.0	24.6	38.3	9.8	-35.7	0.0	0.8	37.7	54.0	-16.3	V	A	
15.960	3.0	35.4	37.6	12.4	-33.9	0.0	0.7	52.2	74.0	-21.8	V	P	
15.960	3.0	23.1	37.6	12.4	-33.9	0.0	0.7	40.0	54.0	-14.0	V	A	

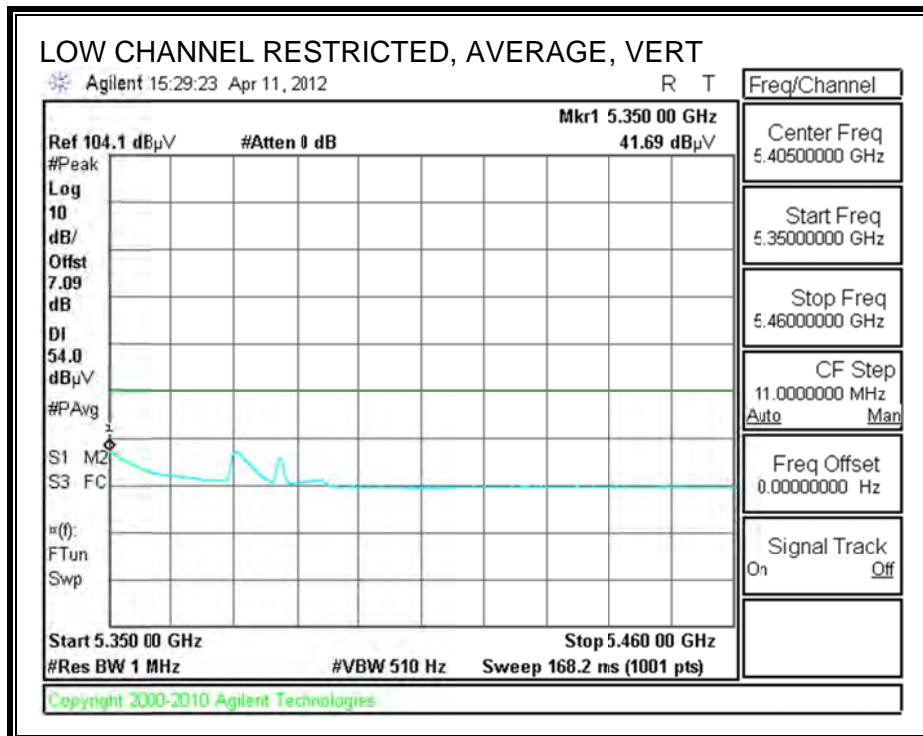
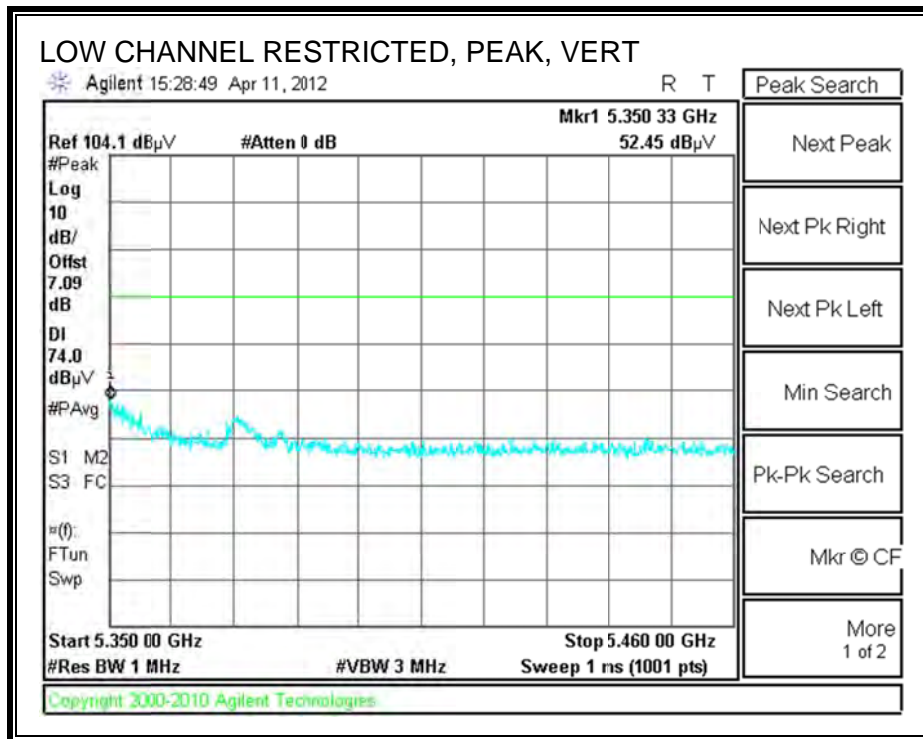
Rev. 4.12.7

Note: No other emissions were detected above the system noise floor.

**INDUCTIVE COVER**

**RESTRICTED BANDEDGE (LOW CHANNEL)**







**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 3m Chamber

Test Engr: Dennis Huang  
 Date: 04/12/11  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.205  
 Mode Oper: 802.11a Tx Mode (InductiveCover)

f Measurement Frequency Amp Preamp Gain Average Field Strength Limit  
 Dist Distance to Antenna D Corr Distance Correct to 3 meters Peak Field Strength Limit  
 Read Analyzer Reading Avg Average Field Strength @ 3 m Margin vs. Average Limit  
 AF Antenna Factor Peak Calculated Peak Field Strength Margin vs. Peak Limit  
 CL Cable Loss HPF High Pass Filter

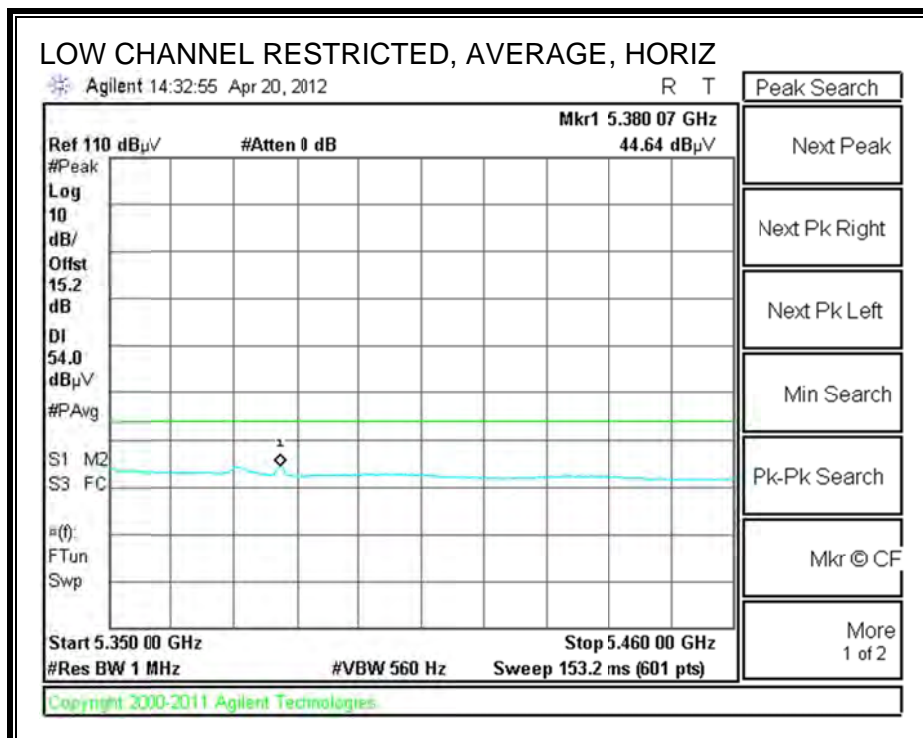
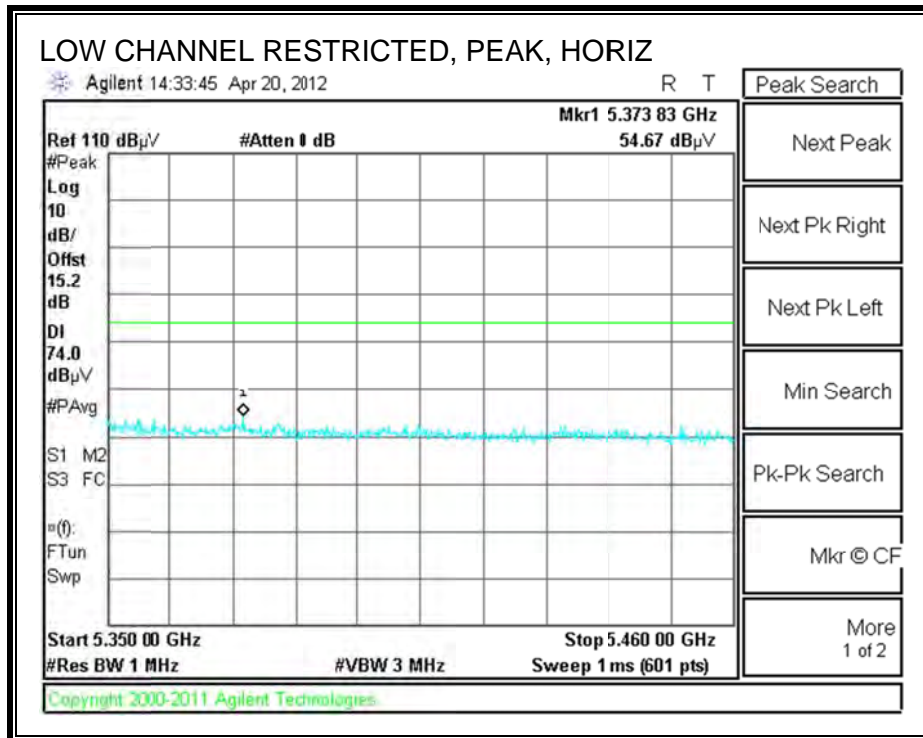
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Corr. dB	Limit dB	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
<b>Low Channel - 5260MHz</b>													
15.780	3.0	34.8	38.2	4.8	-31.9	0.0	0.7	46.6	74.0	-27.4	V	P	
15.780	3.0	24.6	38.2	4.8	-31.9	0.0	0.7	36.4	54.0	-17.6	V	A	
15.780	3.0	34.5	38.2	4.8	-31.9	0.0	0.7	46.3	74.0	-27.7	H	P	
15.780	3.0	24.6	38.2	4.8	-31.9	0.0	0.7	36.4	54.0	-17.6	H	A	
<b>Mid Channel - 5300MHz</b>													
10.600	3.0	34.8	38.4	3.3	-34.0	0.0	0.8	43.3	74.0	-30.7	V	P	
10.600	3.0	26.9	38.4	3.3	-34.0	0.0	0.8	35.3	54.0	-18.7	V	A	
10.600	3.0	34.3	38.4	3.3	-34.0	0.0	0.8	42.7	74.0	-31.3	H	P	
10.600	3.0	24.7	38.4	3.3	-34.0	0.0	0.8	33.2	54.0	-20.8	H	A	
15.900	3.0	34.7	37.8	4.8	-31.8	0.0	0.7	46.1	74.0	-27.9	V	P	
15.900	3.0	24.7	37.8	4.8	-31.8	0.0	0.7	36.1	54.0	-17.9	V	A	
15.900	3.0	34.4	37.8	4.8	-31.8	0.0	0.7	45.9	74.0	-28.1	H	P	
15.900	3.0	24.8	37.8	4.8	-31.8	0.0	0.7	36.2	54.0	-17.8	H	A	
<b>High Channel - 5320MHz</b>													
10.640	3.0	34.6	38.4	3.4	-34.0	0.0	0.8	43.2	74.0	-30.8	V	P	
10.640	3.0	28.4	38.4	3.4	-34.0	0.0	0.8	37.0	54.0	-17.0	V	A	
10.640	3.0	34.5	38.4	10.0	-34.0	0.0	0.8	49.6	74.0	-24.4	H	P	
10.640	3.0	26.6	38.4	10.0	-34.0	0.0	0.8	41.7	54.0	-12.3	H	A	
15.960	3.0	34.8	37.6	13.2	-31.8	0.0	0.7	54.4	74.0	-19.6	V	P	
15.960	3.0	25.0	37.6	13.2	-31.8	0.0	0.7	44.6	54.0	-9.4	V	A	
15.960	3.0	34.5	37.6	13.2	-31.8	0.0	0.7	54.1	74.0	-19.9	H	P	
15.960	3.0	24.8	37.6	13.2	-31.8	0.0	0.7	44.4	54.0	-9.6	H	A	

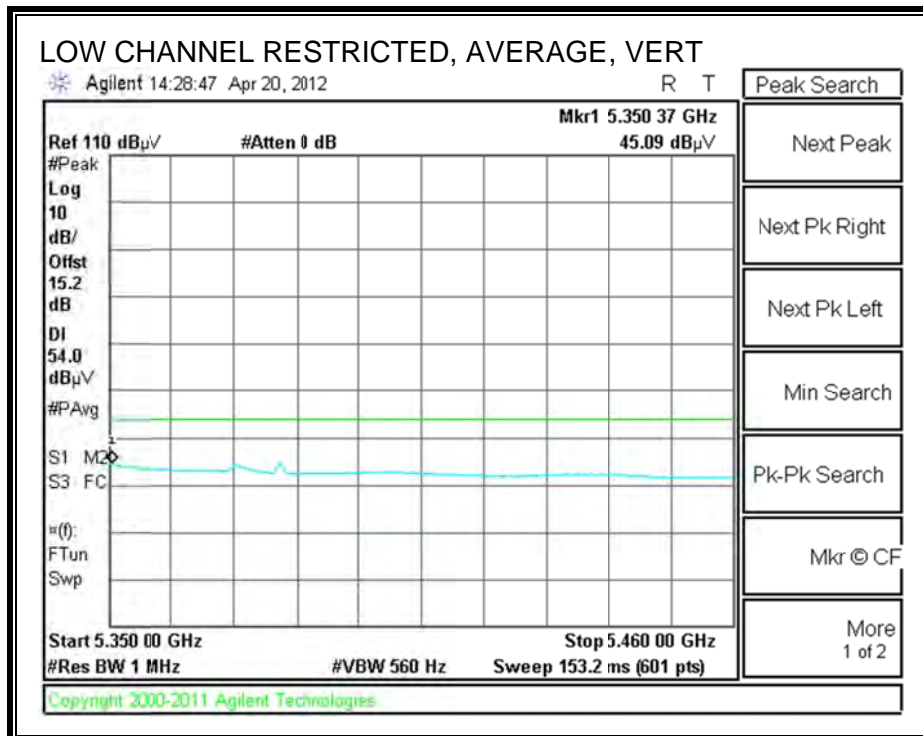
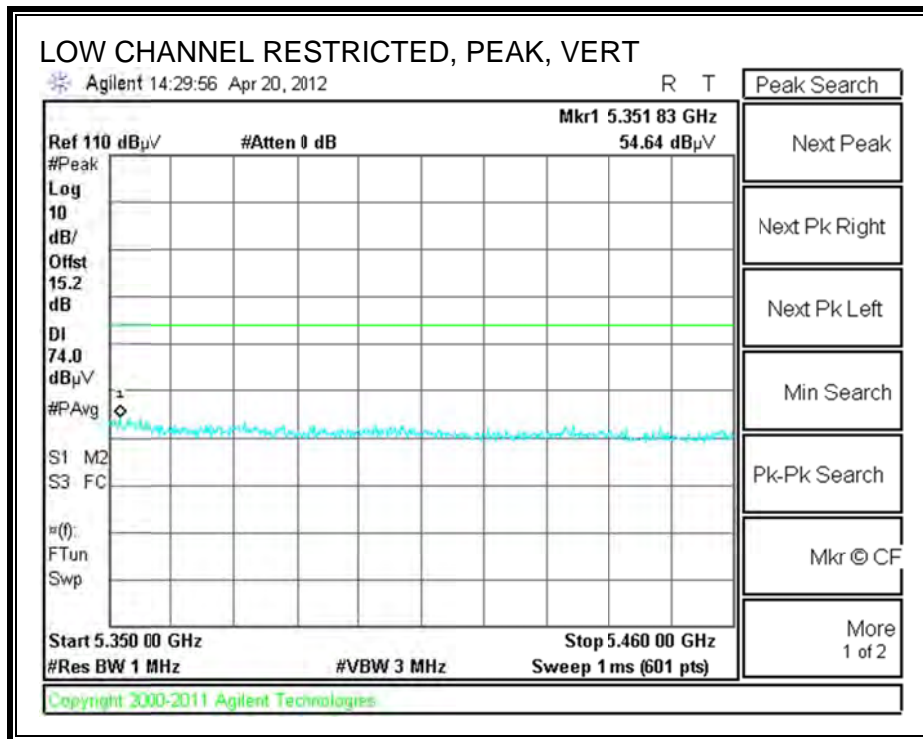
Rev. 4.1.2.7

Note: No other emissions were detected above the system noise floor.

**ON INDUCTIVE CHARGER PAD**

**RESTRICTED BANDEDGE (LOW CHANNEL)**





**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 5m Chamber

Test Engr: Chin Pang  
 Date: 04/20/12  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.407  
 Configuration: EUT (On Inductive Charging Pad)  
 Mode Oper: 5.3GHz, a mode, TX (Worst Case)

f	Measurement Frequency	Amp	Preamp Gain	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter	

f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
<b>Mid Ch, 5300MHz</b>													
10.600	3.0	33.1	38.3	9.7	-35.7	0.0	0.8	46.1	74.0	-27.9	V	P	
10.600	3.0	24.1	38.3	9.7	-35.7	0.0	0.8	37.1	54.0	-16.9	V	A	
15.900	3.0	35.6	37.8	12.4	-33.9	0.0	0.7	52.6	74.0	-21.4	V	P	
15.900	3.0	22.8	37.8	12.4	-33.9	0.0	0.7	39.8	54.0	-14.2	V	A	
10.600	3.0	33.0	38.3	9.7	-35.7	0.0	0.8	46.0	74.0	-28.0	H	P	
10.600	3.0	22.5	38.3	9.7	-35.7	0.0	0.8	35.5	54.0	-18.5	H	A	
15.900	3.0	35.0	37.8	12.4	-33.9	0.0	0.7	52.0	74.0	-22.0	H	P	
15.900	3.0	22.9	37.8	12.4	-33.9	0.0	0.7	39.8	54.0	-14.2	H	A	

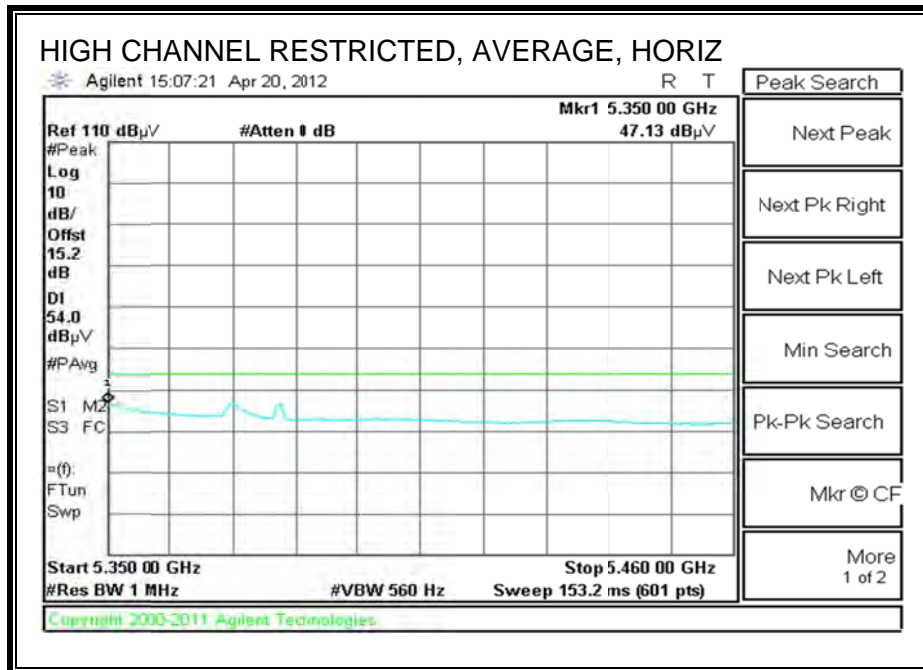
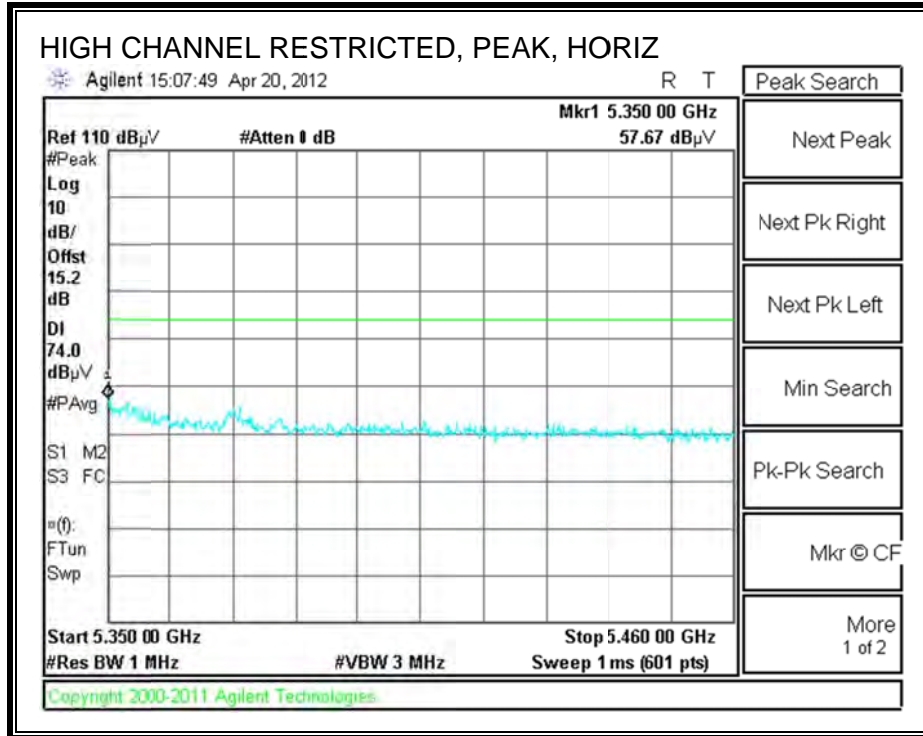
Rev. 4.1.2.7

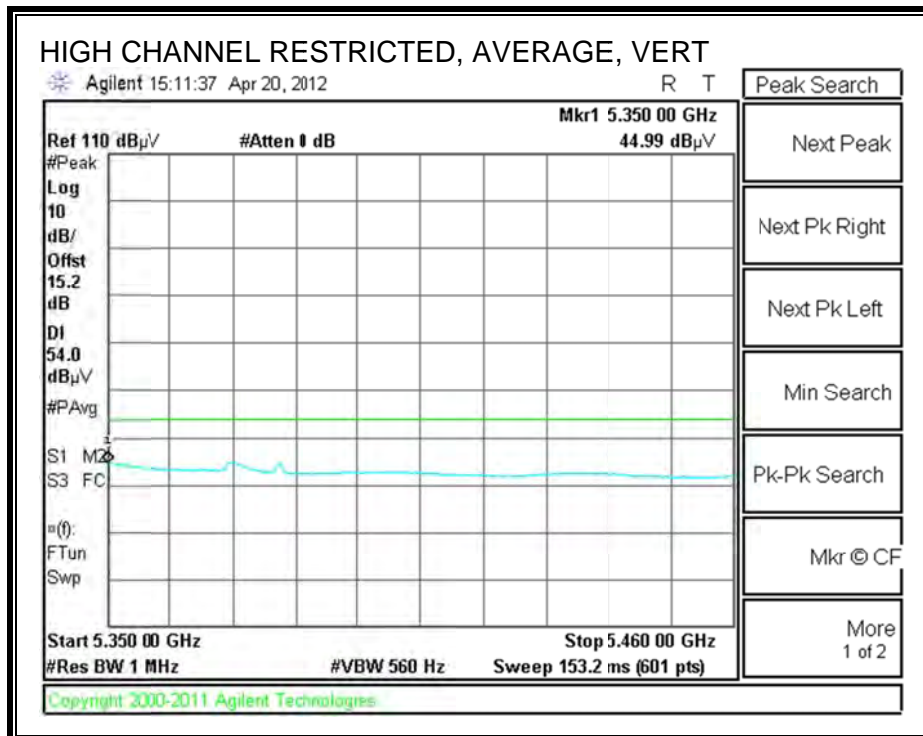
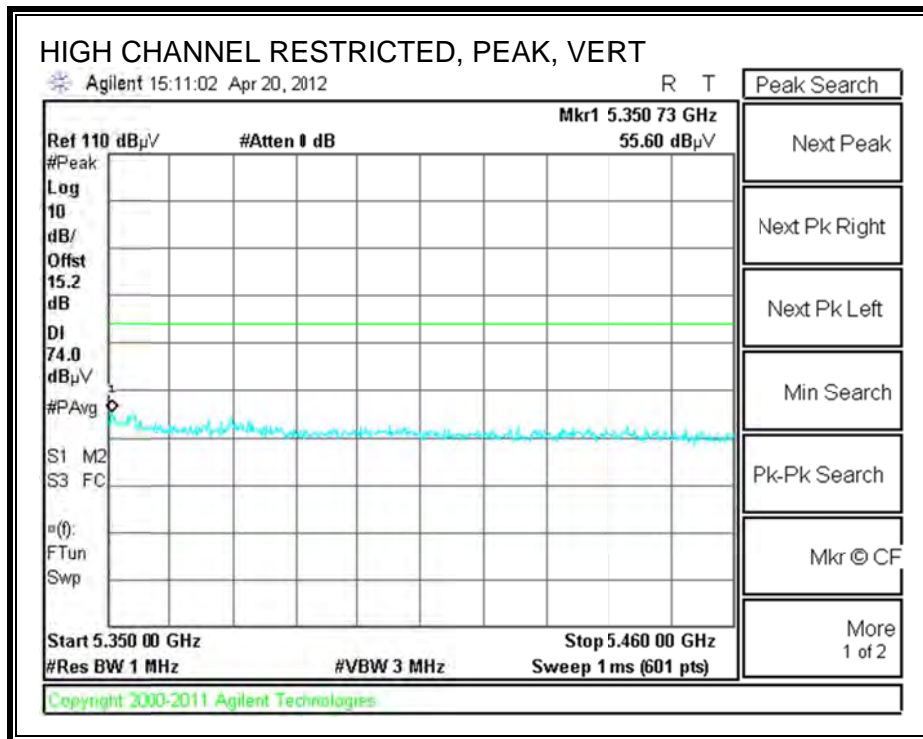
Note: No other emissions were detected above the system noise floor.

### 8.2.4. 802.11n HT20 MODE IN THE 5.3 GHz BAND

#### STANDARD COVER

#### RESTRICTED BANDEDGE (HIGH CHANNEL)





**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 5m Chamber

Test Engr: Chin Pang  
 Date: 04/20/12  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.407  
 Mode Oper: 5.3GHz band, HT20 mode, TX  
 Configuration: EUT(Standard Cover) and AC adapter

f Measurement Frequency Amp Preamp Gain Average Field Strength Limit  
 Dist Distance to Antenna D Corr Distance Correct to 3 meters Peak Field Strength Limit  
 Read Analyzer Reading Avg Average Field Strength @ 3 m Margin vs. Average Limit  
 AF Antenna Factor Peak Calculated Peak Field Strength Margin vs. Peak Limit  
 CL Cable Loss HPF High Pass Filter

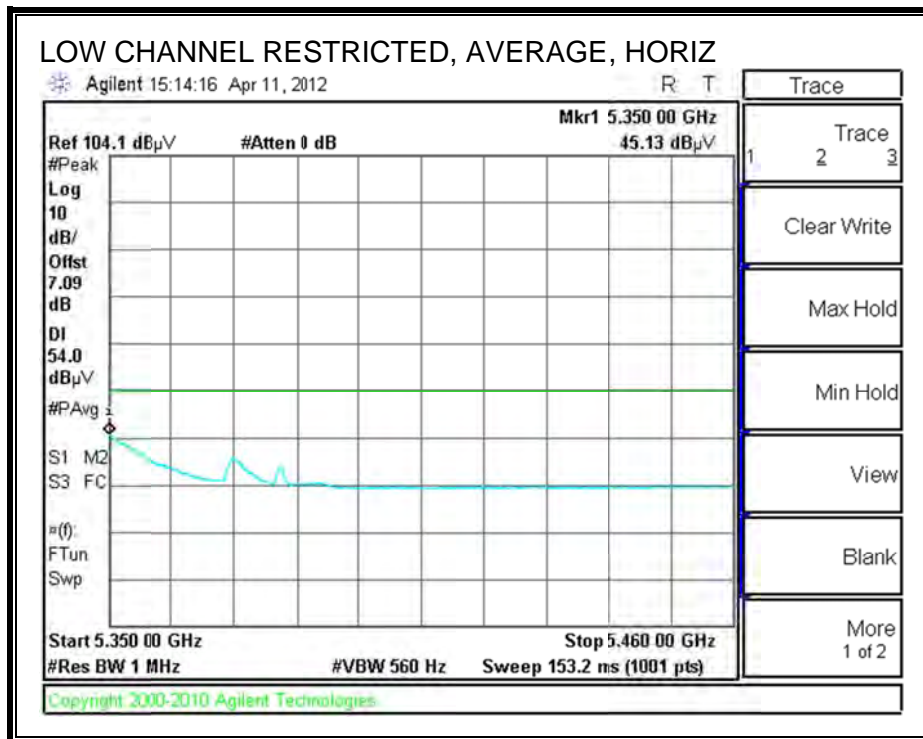
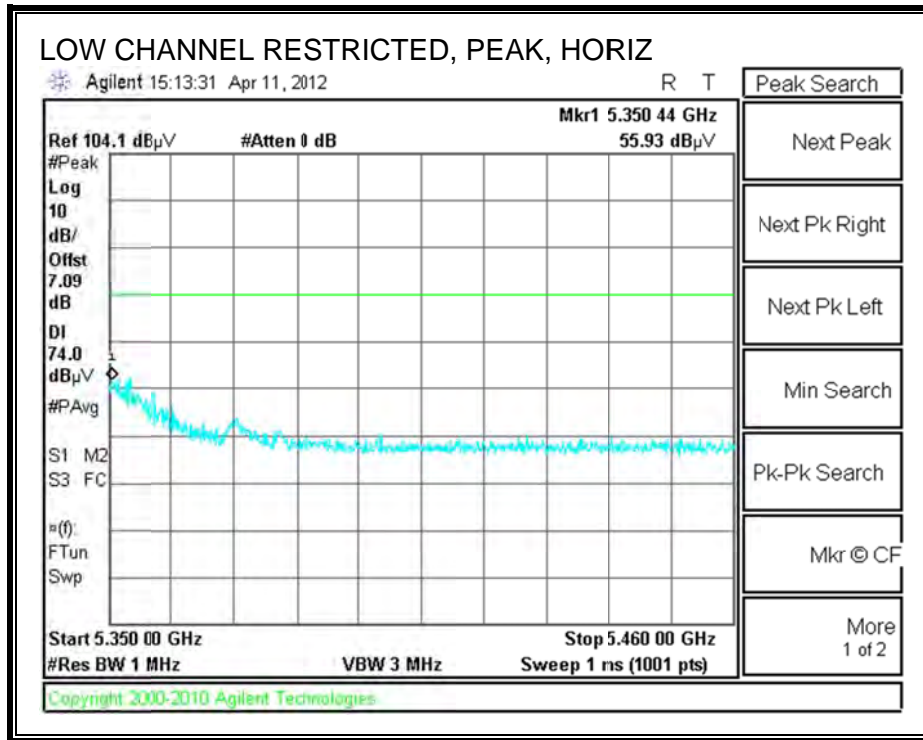
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fltr dB	Corr. dB	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
<b>Low Ch. 5260MHz</b>													
15.780	3.0	35.5	38.2	12.3	-33.9	0.0	0.7	52.8	74.0	-21.2	H	P	
15.780	3.0	23.4	38.2	12.3	-33.9	0.0	0.7	40.6	54.0	-13.4	H	A	
15.780	3.0	34.9	38.2	12.3	-33.9	0.0	0.7	52.2	74.0	-21.8	V	P	
15.780	3.0	23.4	38.2	12.3	-33.9	0.0	0.7	40.7	54.0	-13.3	V	A	
<b>Mid Ch. 5300MHz</b>													
10.600	3.0	35.4	38.3	9.7	-35.7	0.0	0.8	48.4	74.0	-25.6	H	P	
10.600	3.0	26.6	38.3	9.7	-35.7	0.0	0.8	39.7	54.0	-14.3	H	A	
15.900	3.0	35.1	37.8	12.4	-33.9	0.0	0.7	52.0	74.0	-22.0	H	P	
15.900	3.0	22.8	37.8	12.4	-33.9	0.0	0.7	39.8	54.0	-14.2	H	A	
10.600	3.0	34.0	38.3	9.7	-35.7	0.0	0.8	47.0	74.0	-27.0	V	P	
10.600	3.0	24.5	38.3	9.7	-35.7	0.0	0.8	37.6	54.0	-16.4	V	A	
15.900	3.0	35.5	37.8	12.4	-33.9	0.0	0.7	52.4	74.0	-21.6	V	P	
15.900	3.0	22.8	37.8	12.4	-33.9	0.0	0.7	39.8	54.0	-14.2	V	A	
<b>High Ch. 5320MHz</b>													
10.640	3.0	35.5	38.3	9.8	-35.7	0.0	0.8	48.6	74.0	-25.4	H	P	
10.640	3.0	28.4	38.3	9.8	-35.7	0.0	0.8	41.5	54.0	-12.5	H	A	
15.960	3.0	34.9	37.6	12.4	-33.9	0.0	0.7	51.7	74.0	-22.3	H	P	
15.960	3.0	23.1	37.6	12.4	-33.9	0.0	0.7	39.9	54.0	-14.1	H	A	
10.640	3.0	34.9	38.3	9.8	-35.7	0.0	0.8	47.9	74.0	-26.1	V	P	
10.640	3.0	24.8	38.3	9.8	-35.7	0.0	0.8	37.9	54.0	-16.1	V	A	
15.960	3.0	35.0	37.6	12.4	-33.9	0.0	0.7	51.8	74.0	-22.2	V	P	
15.960	3.0	23.1	37.6	12.4	-33.9	0.0	0.7	39.9	54.0	-14.1	V	A	

Rev. 4.12.7

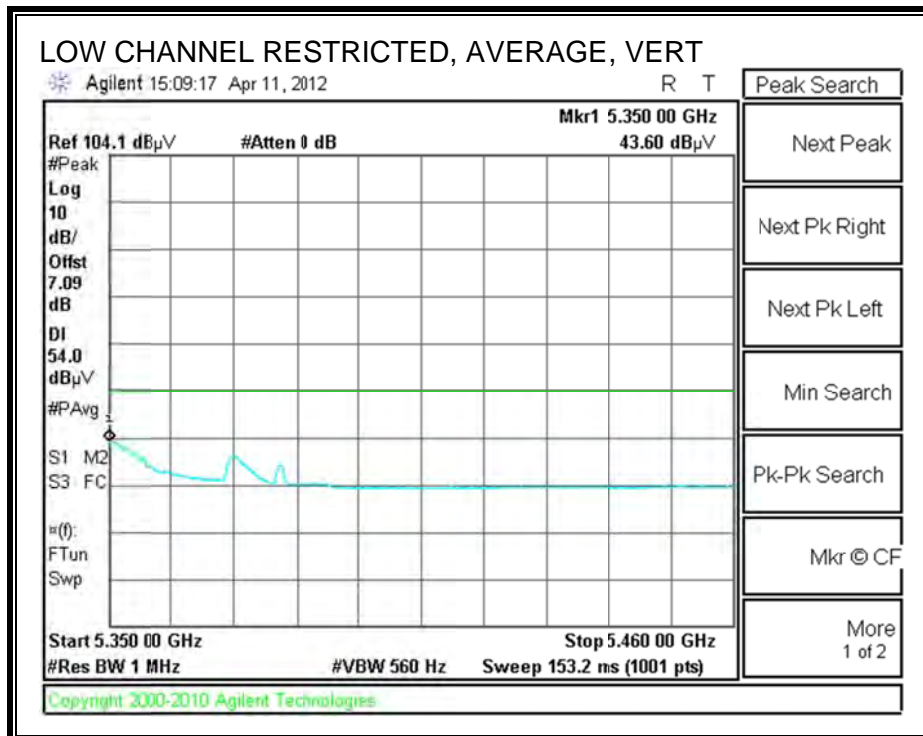
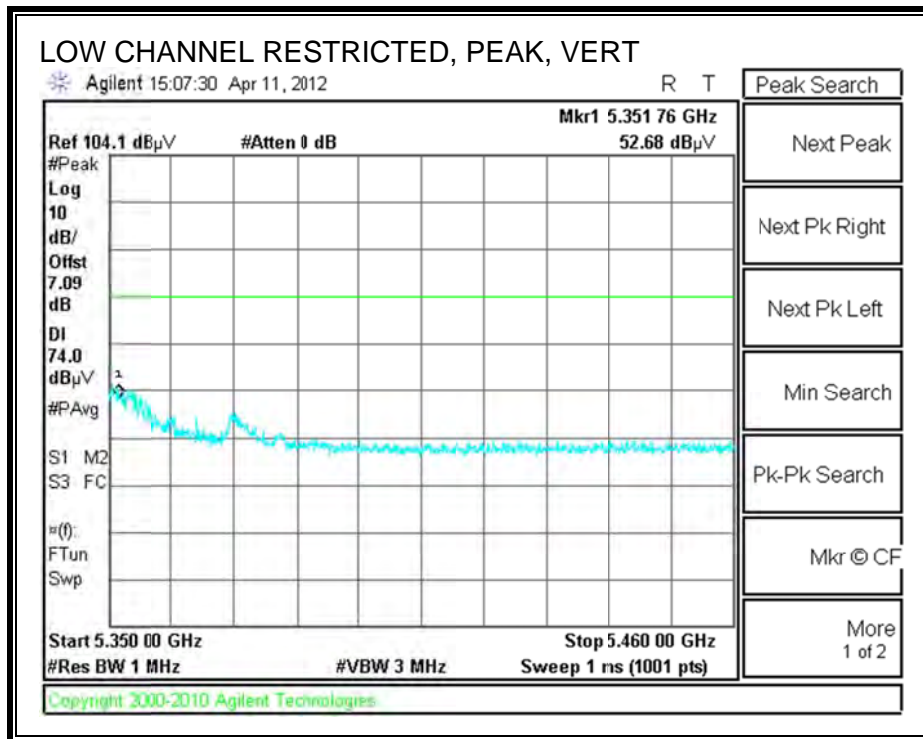
Note: No other emissions were detected above the system noise floor.

**INDUCTIVE COVER**

**RESTRICTED BANDEDGE (LOW CHANNEL)**







**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 5m Chamber

Test Engr: Chin Pang  
 Date: 04/20/12  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.407  
 Configuration: EUT (On Inductive Charging Pad)  
 Mode Oper: 5.3GHz, HT20, TX (Worst Case)

f Measurement Frequency Amp Preamp Gain Average Field Strength Limit  
 Dist Distance to Antenna D Corr Distance Correct to 3 meters Peak Field Strength Limit  
 Read Analyzer Reading Avg Average Field Strength @ 3 m Margin vs. Average Limit  
 AF Antenna Factor Peak Calculated Peak Field Strength Margin vs. Peak Limit  
 CL Cable Loss HPF High Pass Filter

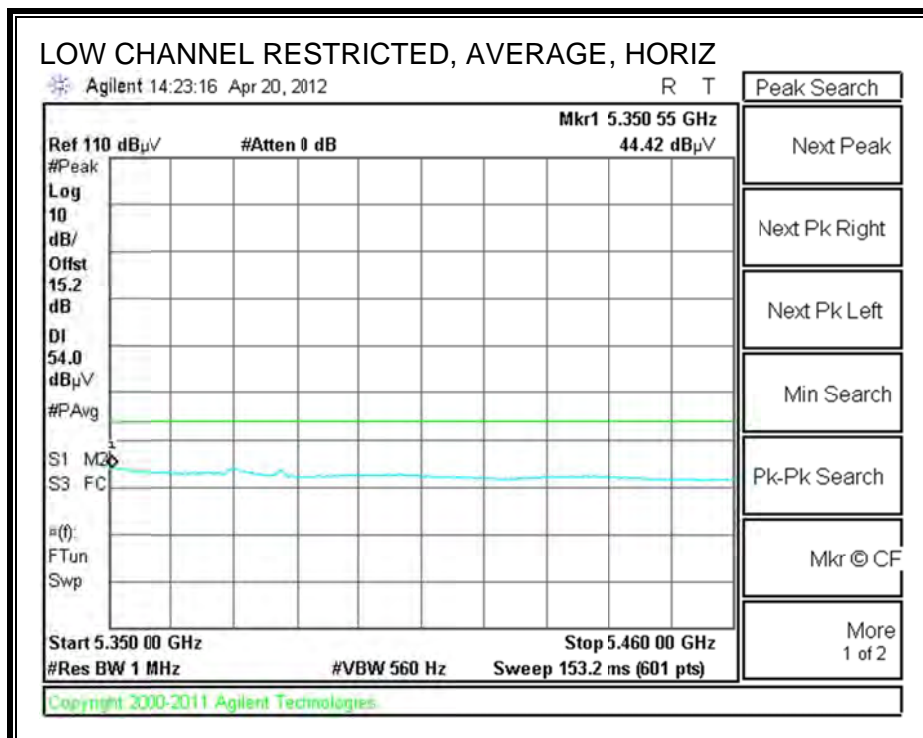
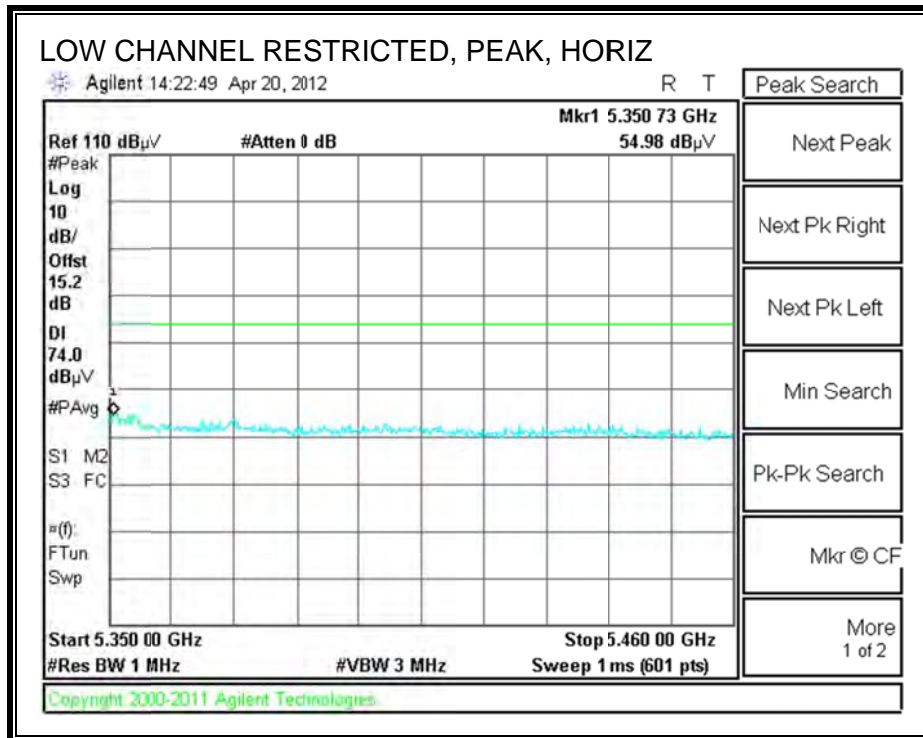
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Fldr dB	Corr. dB	Limit dB	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
<b>Mid Ch, 5300MHz</b>													
10.600	3.0	33.4	38.3	9.7	-35.7	0.0	0.8	46.4	74.0	-27.6	H	P	
10.600	3.0	23.1	38.3	9.7	-35.7	0.0	0.8	36.1	54.0	-17.9	H	A	
15.900	3.0	36.1	37.8	12.4	-33.9	0.0	0.7	53.1	74.0	-20.9	H	P	
15.900	3.0	22.8	37.8	12.4	-33.9	0.0	0.7	39.8	54.0	-14.2	H	A	
10.600	3.0	34.1	38.3	9.7	-35.7	0.0	0.8	47.1	74.0	-26.9	V	P	
10.600	3.0	23.8	38.3	9.7	-35.7	0.0	0.8	36.9	54.0	-17.1	V	A	
15.900	3.0	36.1	37.8	12.4	-33.9	0.0	0.7	53.1	74.0	-20.9	V	P	
15.900	3.0	22.8	37.8	12.4	-33.9	0.0	0.7	39.8	54.0	-14.2	V	A	

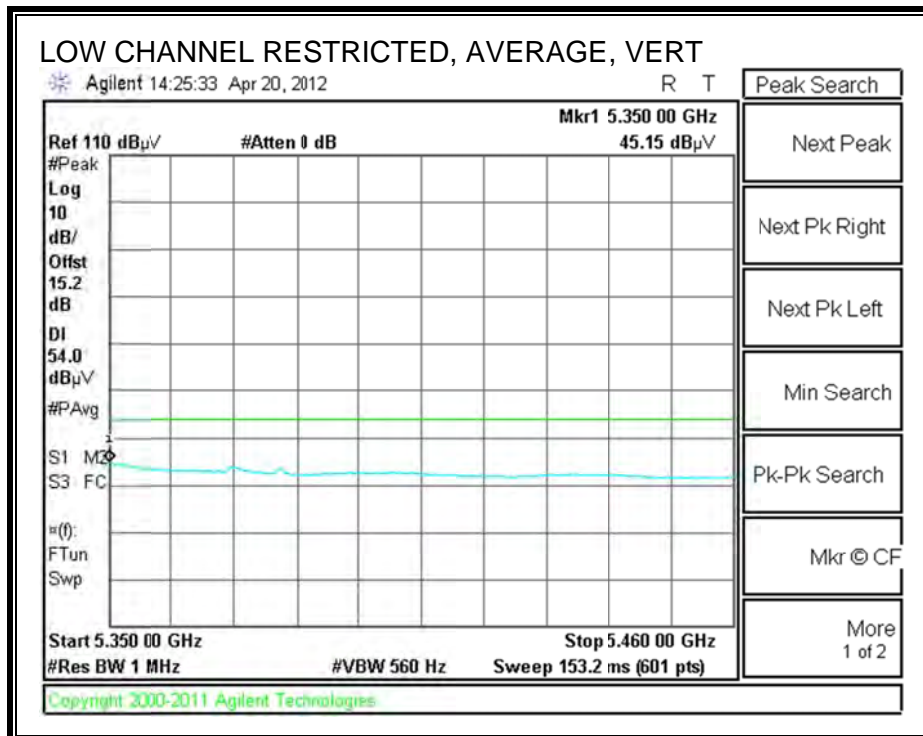
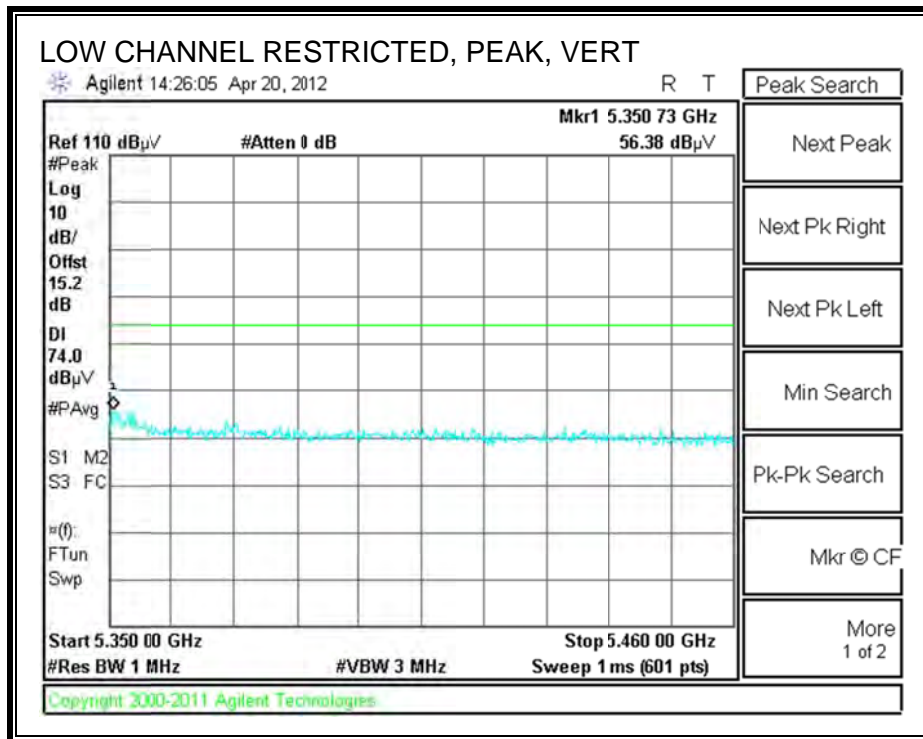
Rev. 4.1.2.7

Note: No other emissions were detected above the system noise floor.

**ON INDUCTIVE CHARGER PAD**

**RESTRICTED BANDEDGE (LOW CHANNEL)**





**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 5m Chamber

Test Engr: Chin Pang  
 Date: 04/20/12  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.407  
 Configuration: EUT (On Inductive Charging Pad)  
 Mode Oper: 5.3GHz, HT20, TX (Worst Case)

f Measurement Frequency Amp Preamp Gain Average Field Strength Limit  
 Dist Distance to Antenna D Corr Distance Correct to 3 meters Peak Field Strength Limit  
 Read Analyzer Reading Avg Average Field Strength @ 3 m Margin vs. Average Limit  
 AF Antenna Factor Peak Calculated Peak Field Strength Margin vs. Peak Limit  
 CL Cable Loss HPF High Pass Filter

f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Corr. dB	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
<b>Mid Ch, 5300MHz</b>													
10.600	3.0	33.4	38.3	9.7	-35.7	0.0	0.8	46.4	74.0	-27.6	H	P	
10.600	3.0	23.1	38.3	9.7	-35.7	0.0	0.8	36.1	54.0	-17.9	H	A	
15.900	3.0	36.1	37.8	12.4	-33.9	0.0	0.7	53.1	74.0	-20.9	H	P	
15.900	3.0	22.8	37.8	12.4	-33.9	0.0	0.7	39.8	54.0	-14.2	H	A	
10.600	3.0	34.1	38.3	9.7	-35.7	0.0	0.8	47.1	74.0	-26.9	V	P	
10.600	3.0	23.8	38.3	9.7	-35.7	0.0	0.8	36.9	54.0	-17.1	V	A	
15.900	3.0	36.1	37.8	12.4	-33.9	0.0	0.7	53.1	74.0	-20.9	V	P	
15.900	3.0	22.8	37.8	12.4	-33.9	0.0	0.7	39.8	54.0	-14.2	V	A	

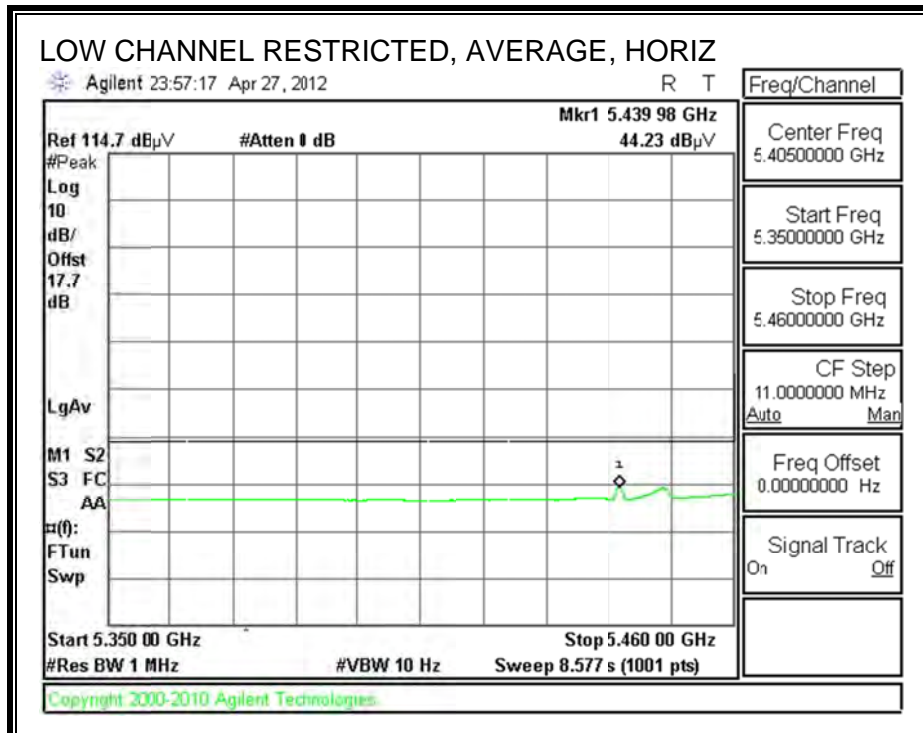
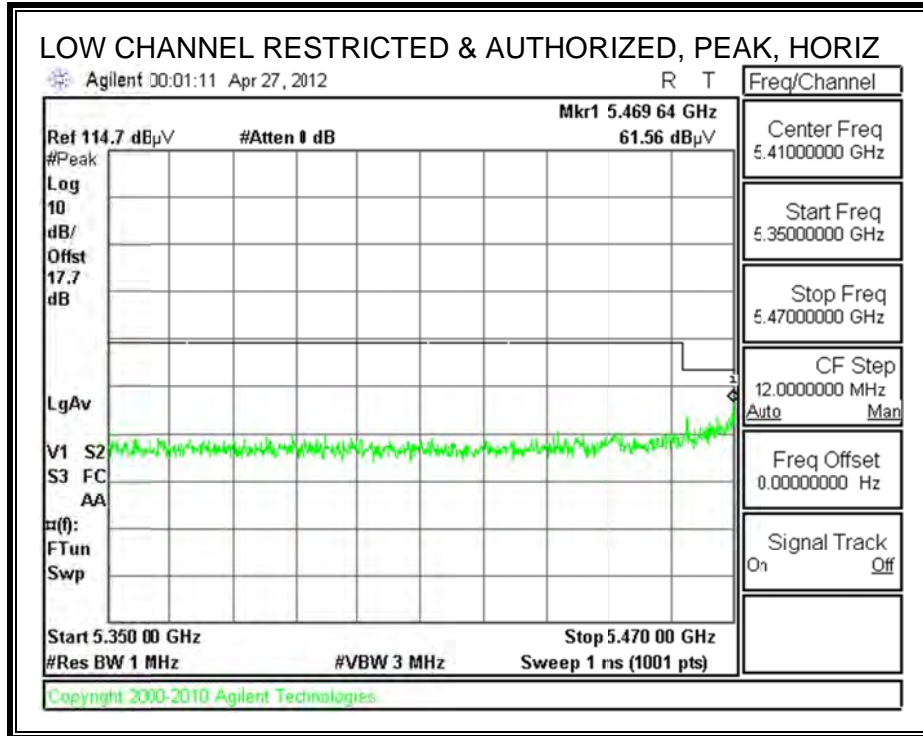
Rev. 4.12.7

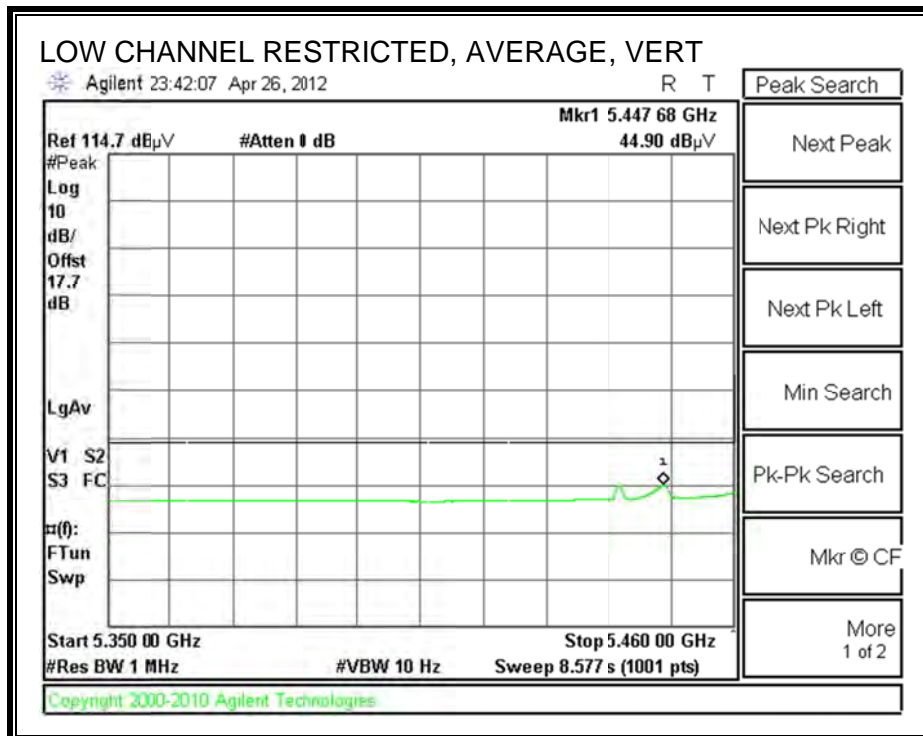
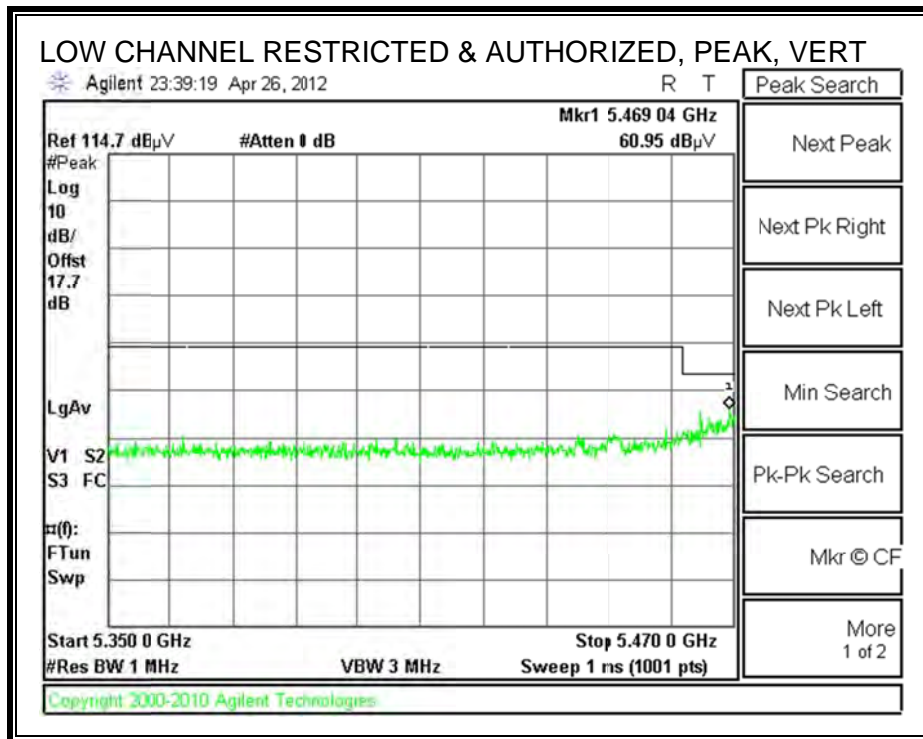
Note: No other emissions were detected above the system noise floor.

### 8.2.5. 802.11a MODE IN THE 5.6 GHz BAND

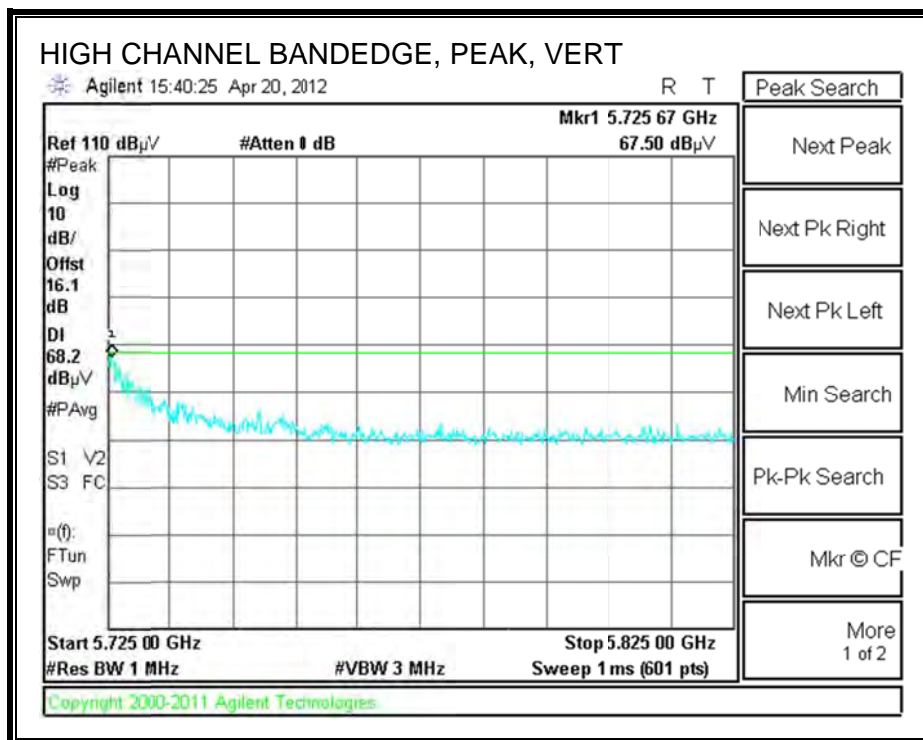
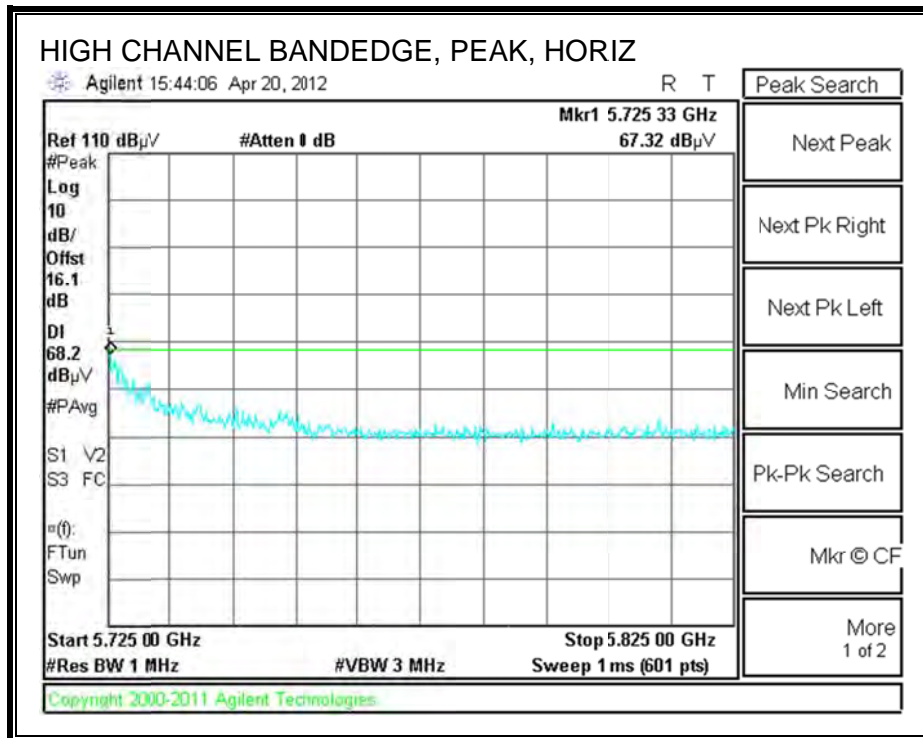
#### STANDARD COVER

#### RESTRICTED & AUTHORIZED BANDEDGE (LOW CHANNEL)





**AUTHORIZED BANDEDGE (HIGH CHANNEL)**





**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 5m Chamber

Test Engr: Chin Pang  
 Date: 04/20/12  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.407  
 Mode Oper: 5.5GHz band, a mode, TX  
 Configuration: EUT(Standard Cover) and AC adapter

f	Measurement Frequency	Amp	Preamp Gain	Average Field Strength Limit
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters	Peak Field Strength Limit
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m	Margin vs. Average Limit
AF	Antenna Factor	Peak	Calculated Peak Field Strength	Margin vs. Peak Limit
CL	Cable Loss	HPF	High Pass Filter	

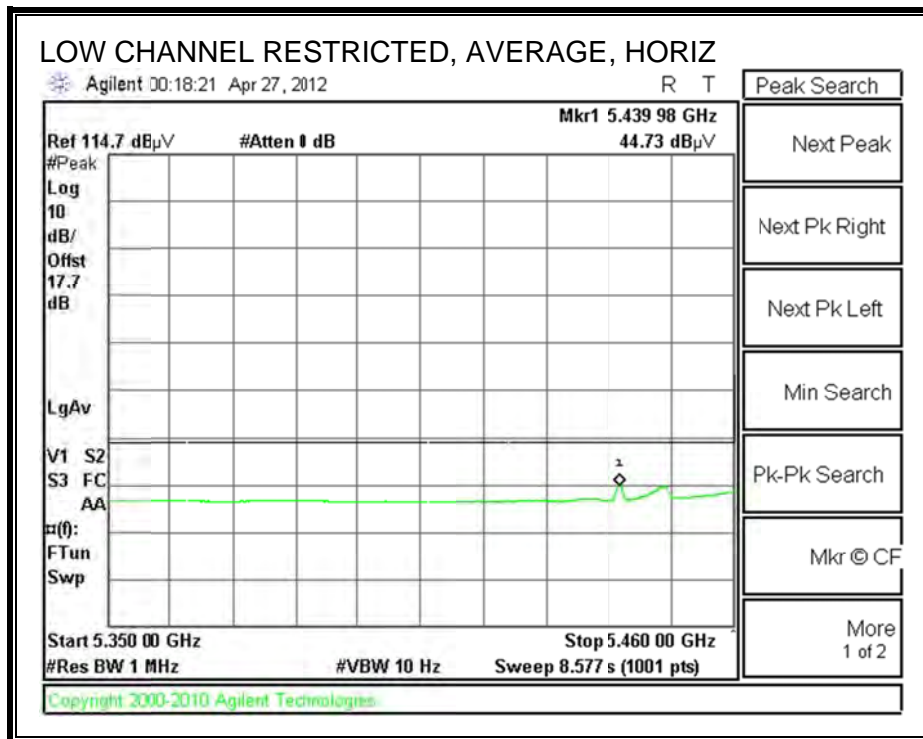
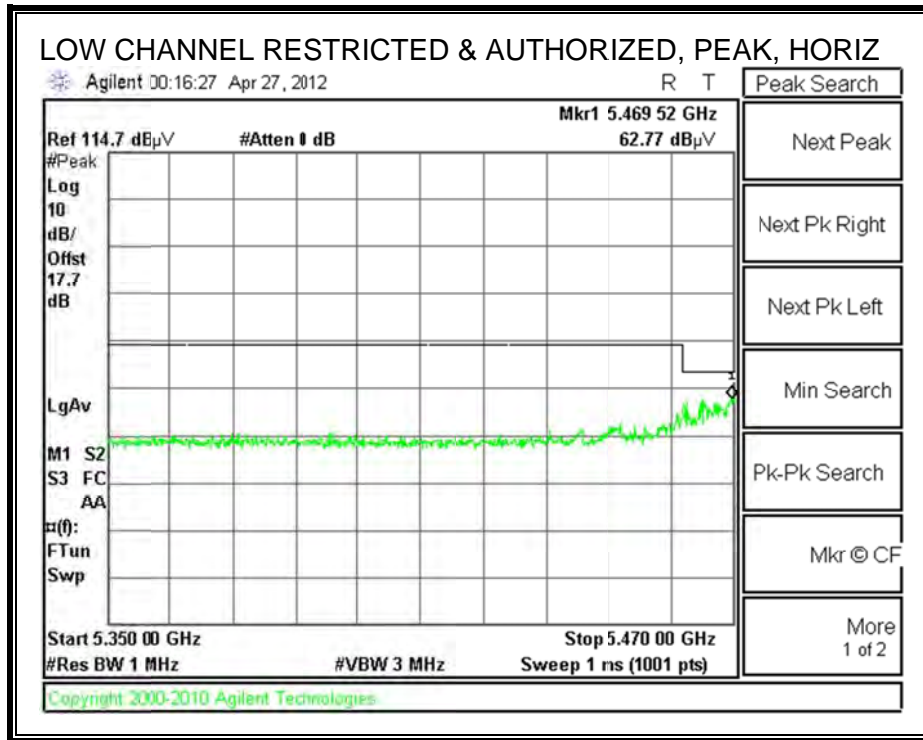
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Corr. dB	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
<b>Low Ch, 5500MHz</b>													
11.000	3.0	38.7	38.4	10.2	-35.6	0.0	0.7	52.4	74.0	-21.6	H	P	
11.000	3.0	32.1	38.4	10.2	-35.6	0.0	0.7	45.7	54.0	-8.3	H	A	
11.000	3.0	35.2	38.4	10.2	-35.6	0.0	0.7	48.8	74.0	-25.2	V	P	
11.000	3.0	26.5	38.4	10.2	-35.6	0.0	0.7	40.1	54.0	-13.9	V	A	
<b>Mid Ch, 5580MHz</b>													
11.160	3.0	35.9	38.5	10.3	-35.6	0.0	0.7	49.9	74.0	-24.1	H	P	
11.160	3.0	28.0	38.5	10.3	-35.6	0.0	0.7	42.0	54.0	-12.0	H	A	
11.160	3.0	34.9	38.5	10.3	-35.6	0.0	0.7	48.8	74.0	-25.2	V	P	
11.160	3.0	25.9	38.5	10.3	-35.6	0.0	0.7	39.8	54.0	-14.2	V	A	
<b>High Ch, 5700MHz</b>													
11.400	3.0	35.5	38.7	10.6	-35.6	0.0	0.7	50.0	74.0	-24.0	H	P	
11.400	3.0	26.9	38.7	10.6	-35.6	0.0	0.7	41.4	54.0	-12.6	H	A	
11.400	3.0	35.4	38.7	10.6	-35.6	0.0	0.7	50.0	74.0	-24.0	V	P	
11.400	3.0	25.4	38.7	10.6	-35.6	0.0	0.7	39.9	54.0	-14.1	V	A	

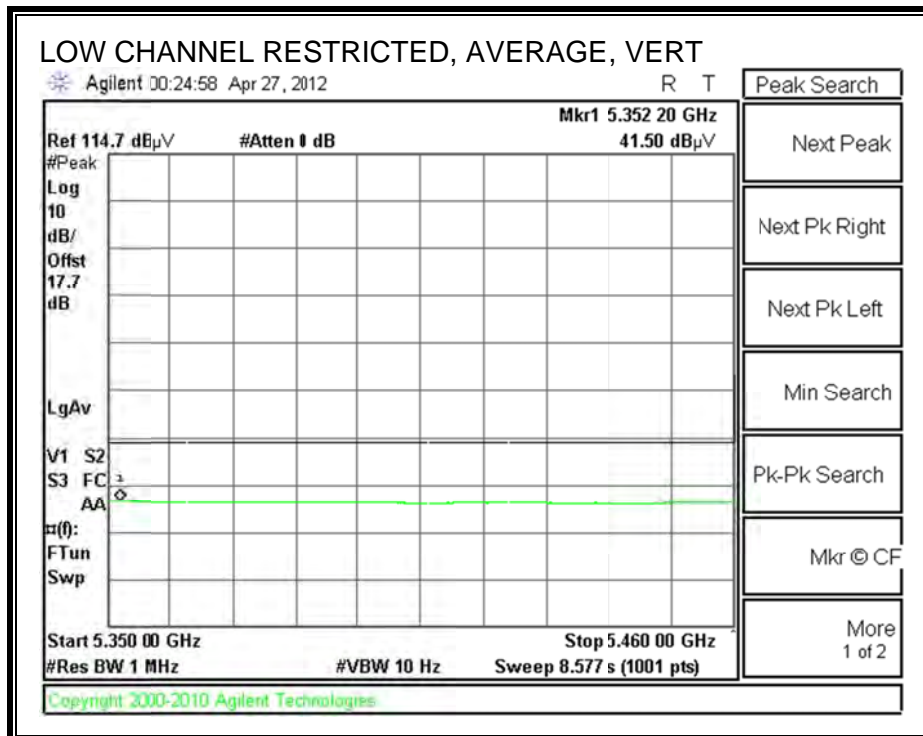
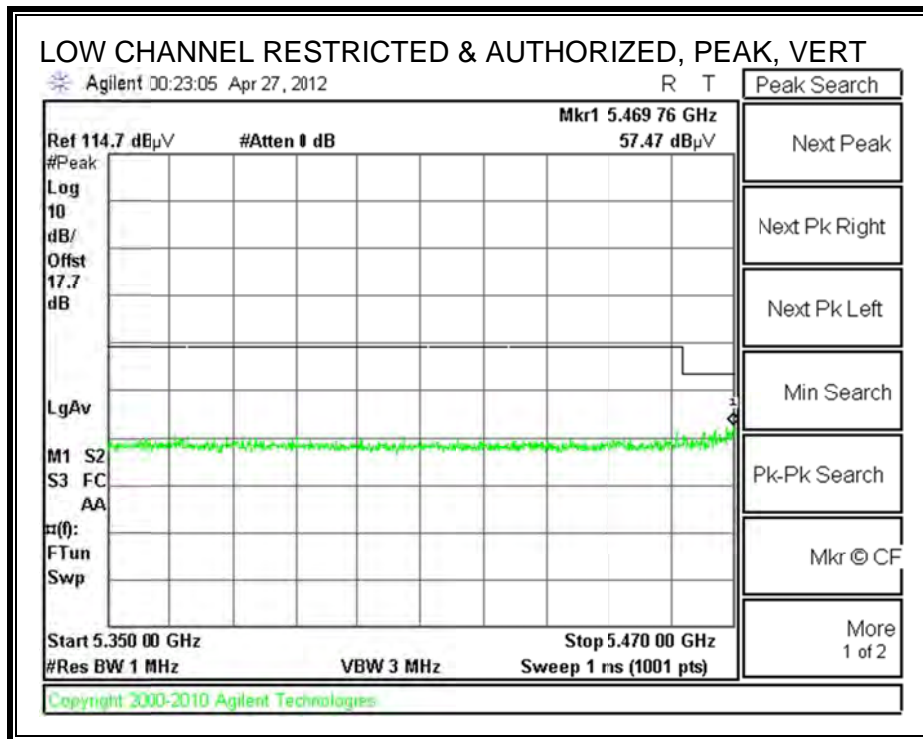
Rev. 4.1.2.7

Note: No other emissions were detected above the system noise floor.

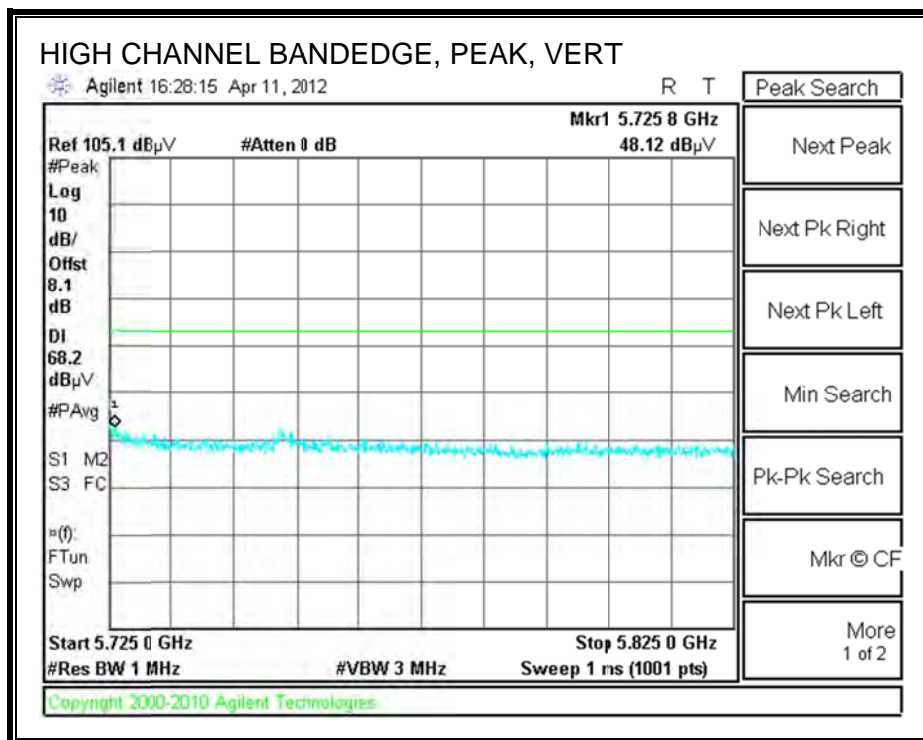
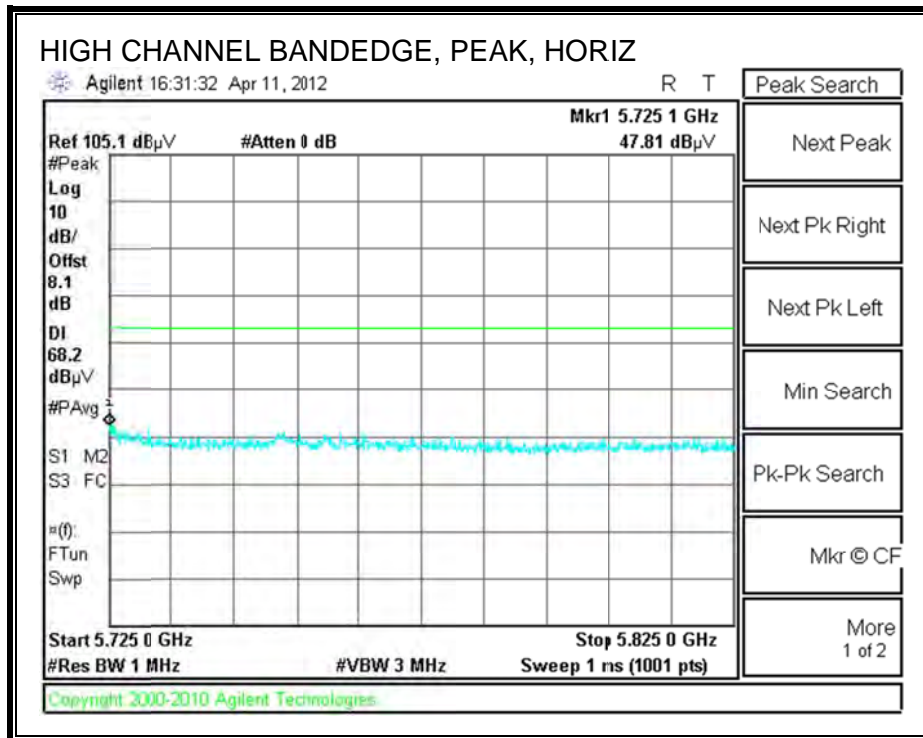
**INDUCTIVE COVER**

**RESTRICTED & AUTHORIZED BANDEGE (LOW CHANNEL)**





**AUTHORIZED BANDEDGE (HIGH CHANNEL)**



**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 3m Chamber

Test Engr: Dennis Huang  
 Date: 04/11/12  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.205  
 Mode Oper: 802.11a Tx Mode (Inducting Case with NFC Loop Ant)

f Measurement Frequency Amp Preamp Gain Average Field Strength Limit  
 Dist Distance to Antenna D Corr Distance Correct to 3 meters Peak Field Strength Limit  
 Read Analyzer Reading Avg Average Field Strength @ 3 m Margin vs. Average Limit  
 AF Antenna Factor Peak Calculated Peak Field Strength Margin vs. Peak Limit  
 CL Cable Loss HPF High Pass Filter

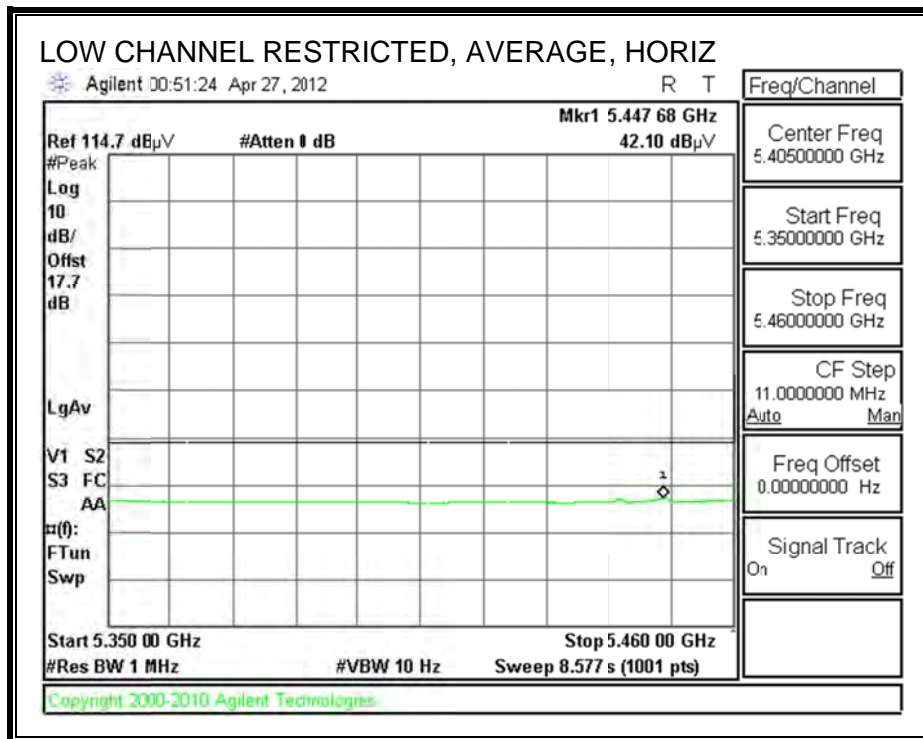
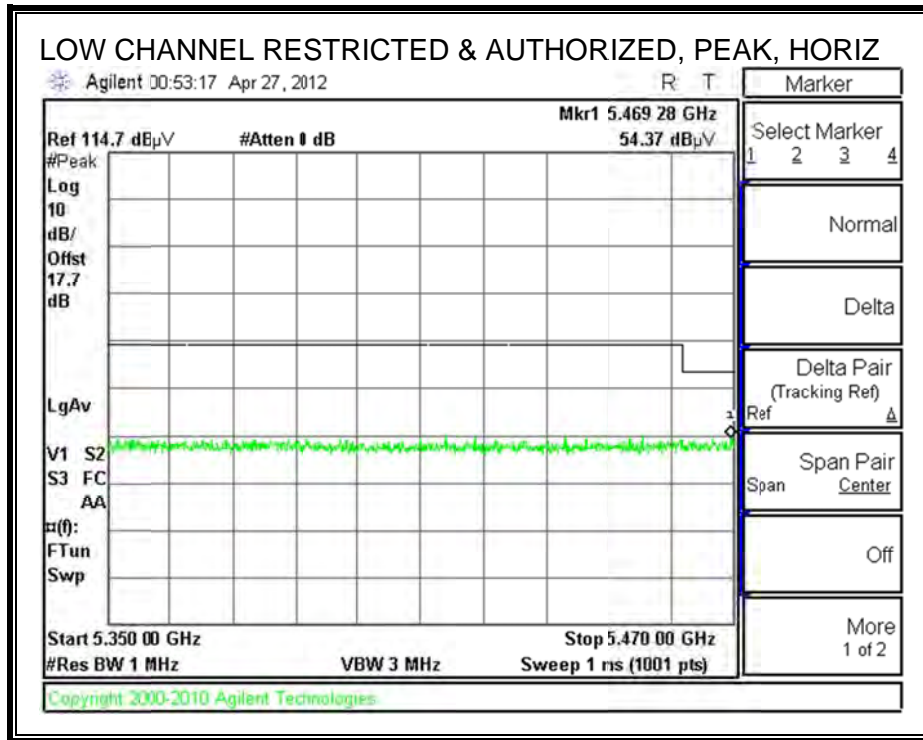
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
<b>Low Channel - 5500MHz</b>													
11.000	3.0	34.1	38.4	10.5	-33.6	0.0	0.7	50.2	74.0	-23.8	V	P	
11.000	3.0	25.8	38.4	10.5	-33.6	0.0	0.7	41.8	54.0	-12.2	V	A	
11.000	3.0	35.9	38.4	10.5	-33.6	0.0	0.7	51.9	74.0	-22.1	H	P	
11.000	3.0	29.5	38.4	10.5	-33.6	0.0	0.7	45.5	54.0	-8.5	H	A	
<b>Mid Channel - 5580MHz</b>													
11.160	3.0	36.0	38.5	10.7	-33.4	0.0	0.7	52.5	74.0	-21.5	V	P	
11.160	3.0	28.9	38.5	10.7	-33.4	0.0	0.7	45.5	54.0	-8.5	V	A	
11.160	3.0	37.1	38.5	10.7	-33.4	0.0	0.7	53.7	74.0	-20.3	H	P	
11.160	3.0	30.1	38.5	10.7	-33.4	0.0	0.7	46.6	54.0	-7.4	H	A	
<b>High Channel - 5700MHz</b>													
11.400	3.0	35.3	38.8	11.1	-33.2	0.0	0.7	52.7	74.0	-21.3	V	P	
11.400	3.0	27.0	38.8	11.1	-33.2	0.0	0.7	44.4	54.0	-9.6	V	A	
11.400	3.0	38.5	38.8	11.1	-33.2	0.0	0.7	55.9	74.0	-18.1	H	P	
11.400	3.0	33.3	38.8	11.1	-33.2	0.0	0.7	50.7	54.0	-3.3	H	A	

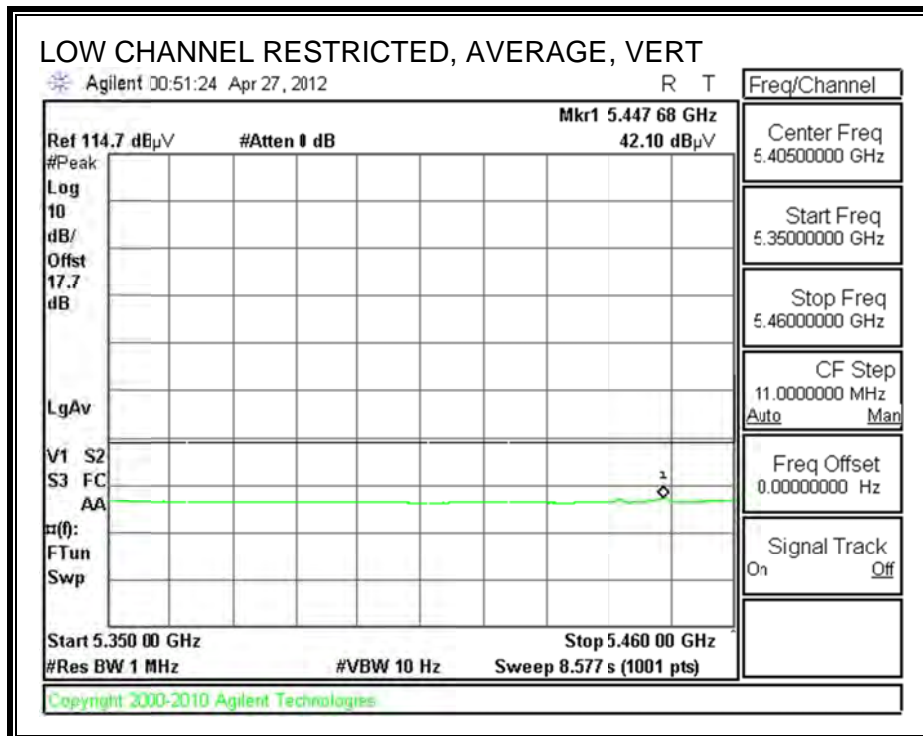
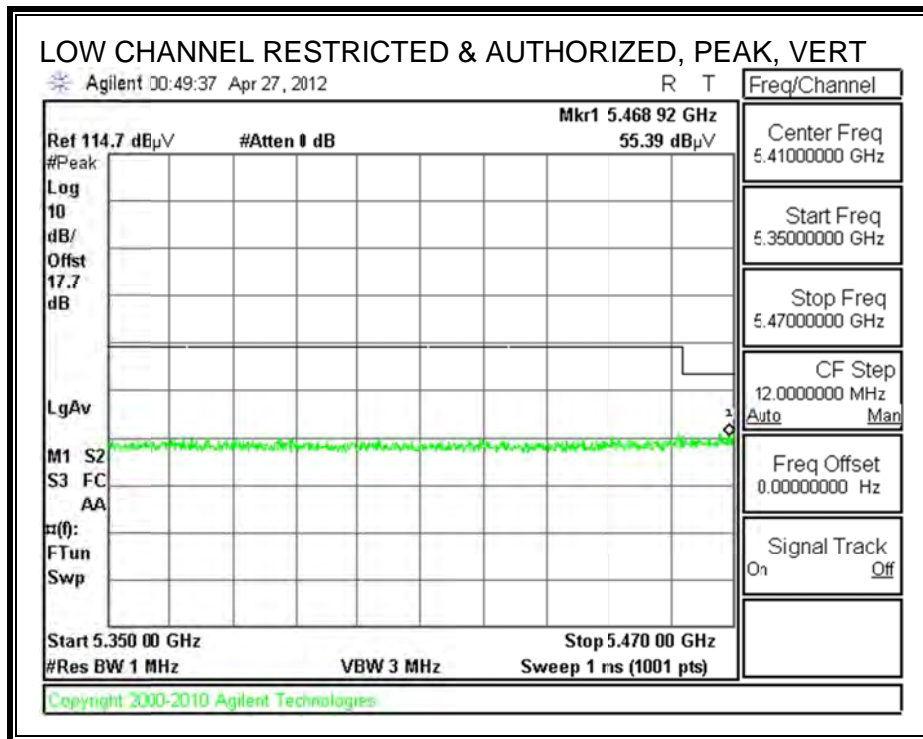
Rev. 4.1.2.7

Note: No other emissions were detected above the system noise floor.

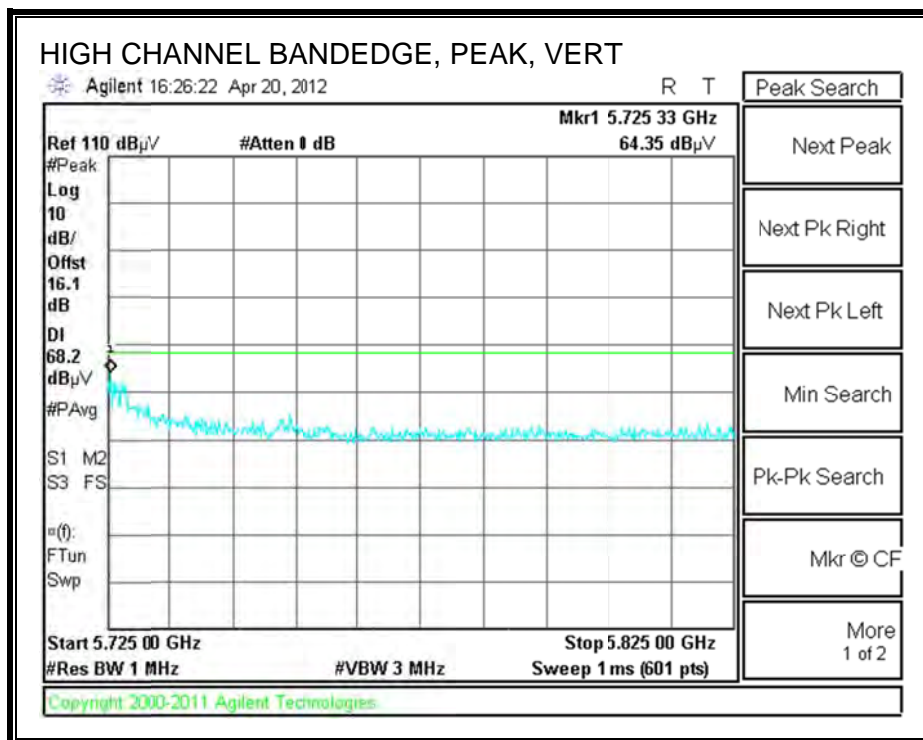
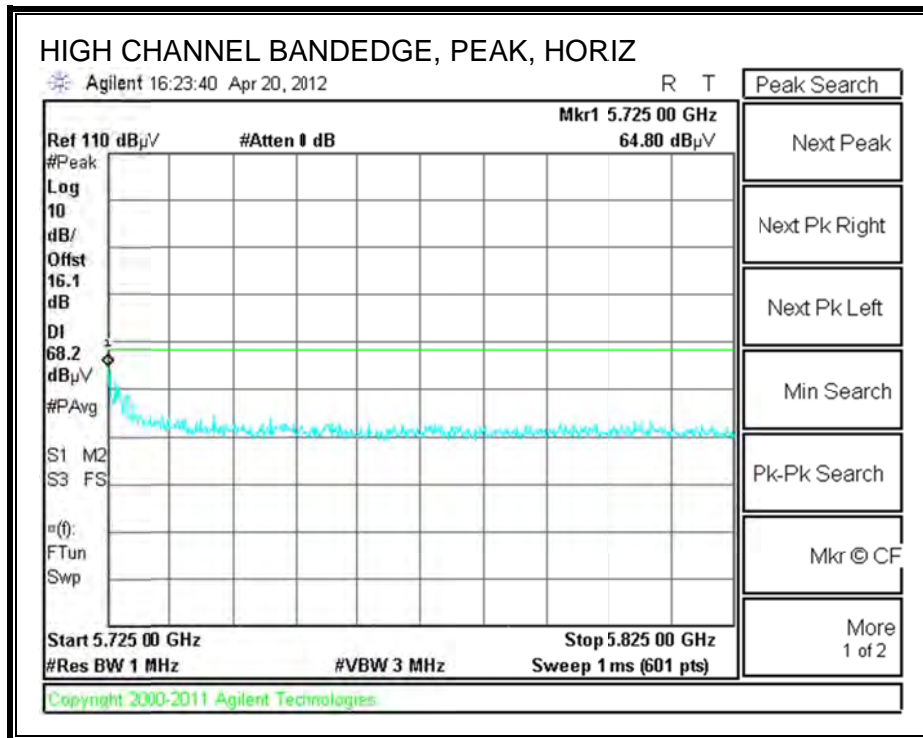
**ON INDUCTIVE CHARGER PAD**

**RESTRICTED & AUTHORIZED BANEDGE (LOW CHANNEL)**





**AUTHORIZED BANDEDGE (HIGH CHANNEL)**





**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 5m Chamber

Test Engr: Chin Pang  
 Date: 04/20/12  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.407  
 Configuration: EUT (On Inductive Charging Pad)  
 Mode Oper: 5.6GHz, a mode, TX (Worst Case)

f Measurement Frequency Amp Preamp Gain Average Field Strength Limit  
 Dist Distance to Antenna D Corr Distance Correct to 3 meters Peak Field Strength Limit  
 Read Analyzer Reading Avg Average Field Strength @ 3 m Margin vs. Average Limit  
 AF Antenna Factor Peak Calculated Peak Field Strength Margin vs. Peak Limit  
 CL Cable Loss HPF High Pass Filter

f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
<b>Mid Ch. 5580MHz</b>													
11.160	3.0	34.4	38.5	10.3	-35.6	0.0	0.7	48.4	74.0	-25.6	H	P	
11.160	3.0	24.4	38.5	10.3	-35.6	0.0	0.7	38.3	54.0	-15.7	H	A	
11.160	3.0	34.4	38.5	10.3	-35.6	0.0	0.7	48.4	74.0	-25.6	V	P	
11.160	3.0	25.6	38.5	10.3	-35.6	0.0	0.7	39.6	54.0	-14.4	V	A	

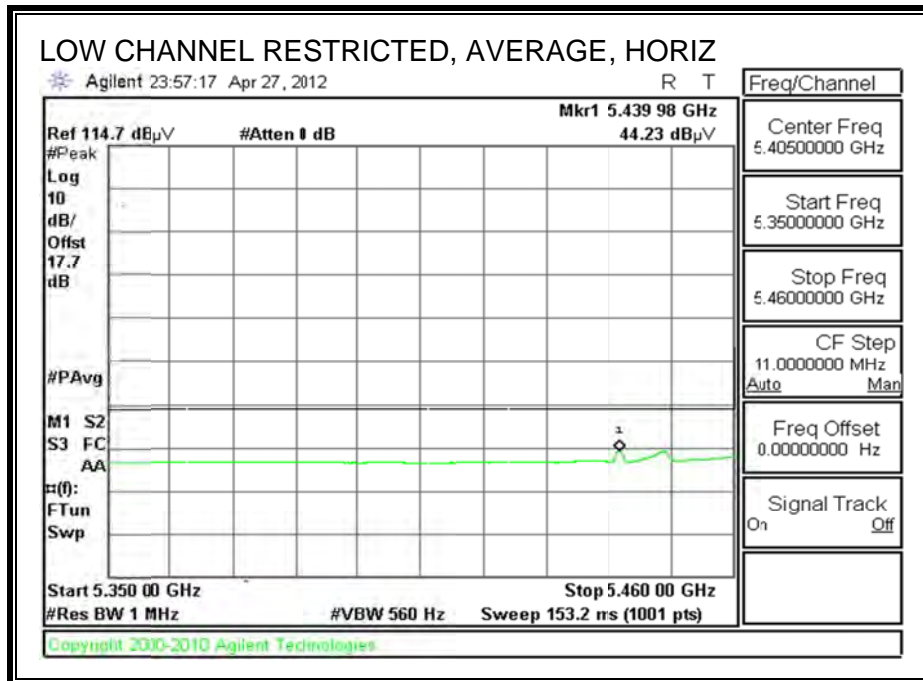
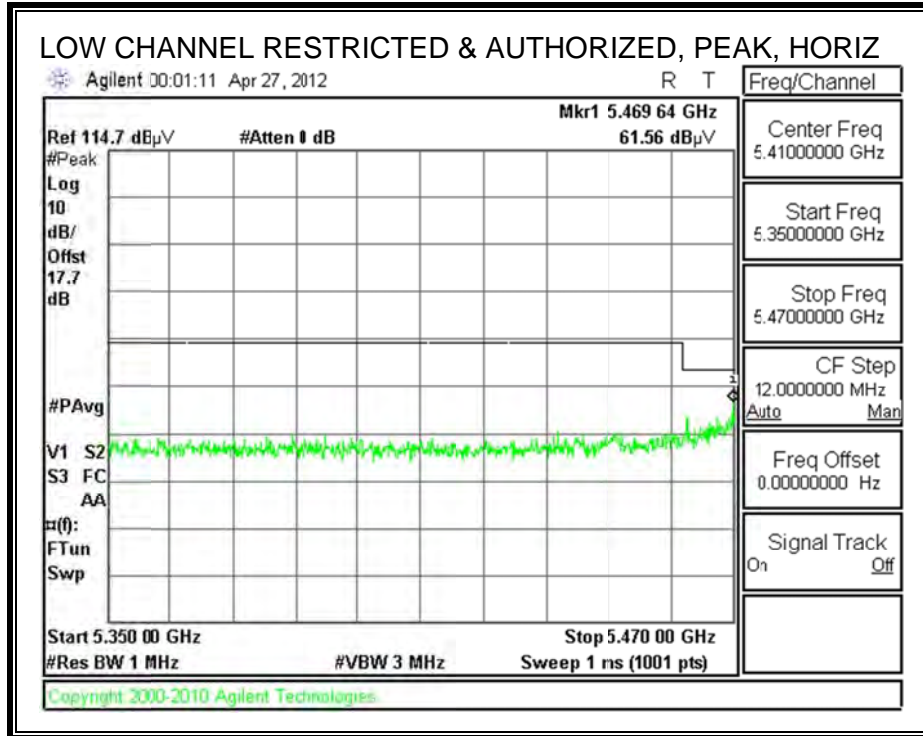
Rev. 4.1.2.7

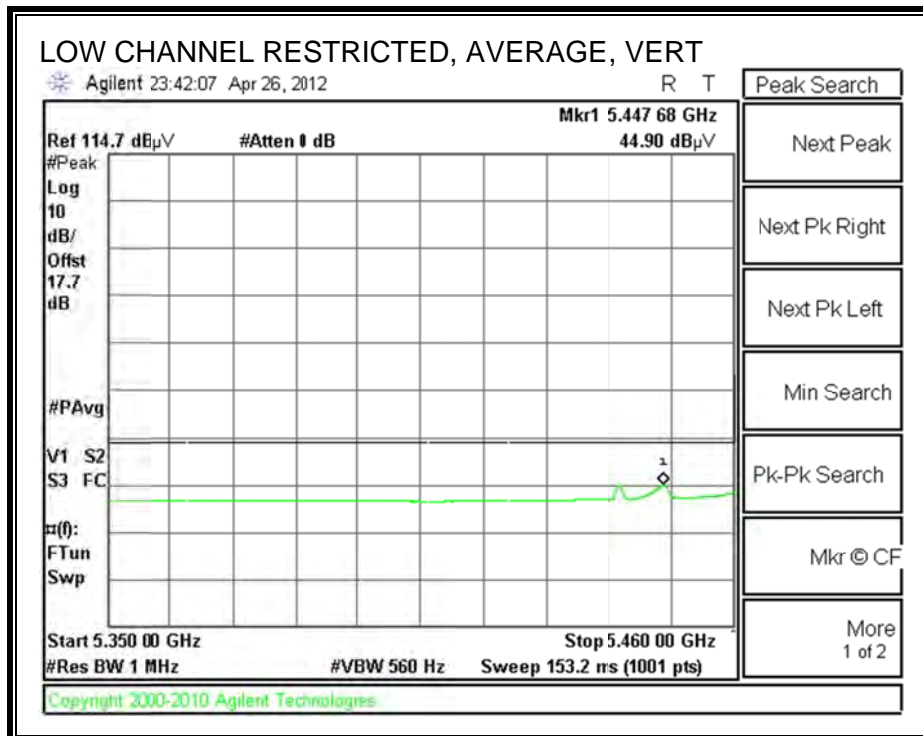
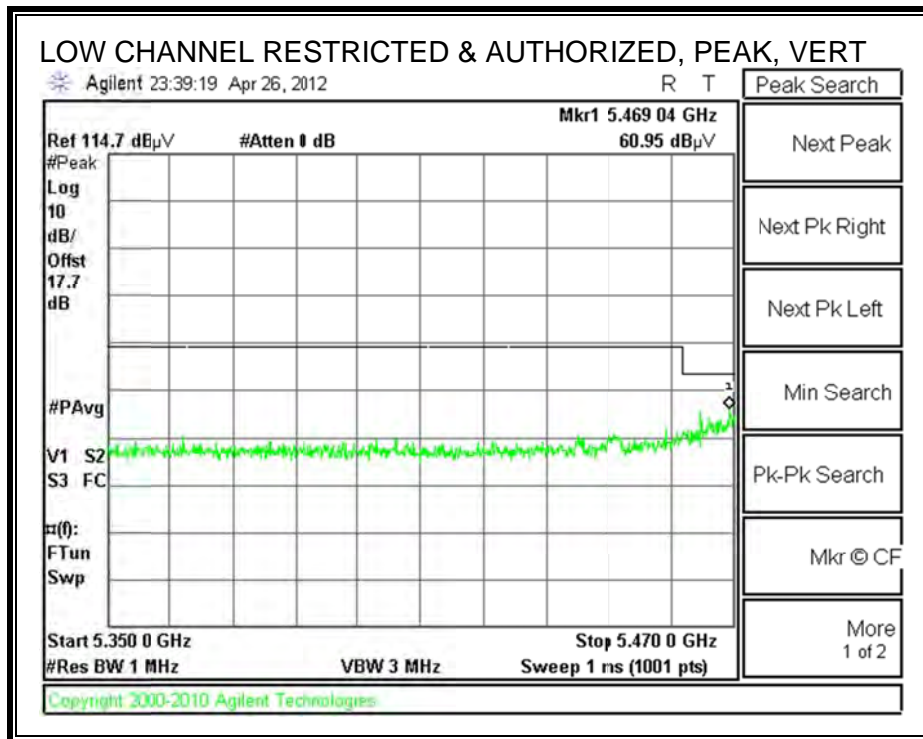
Note: No other emissions were detected above the system noise floor.

### 8.2.6. TX ABOVE 1 GHz 802.11n HT20 MODE IN THE 5.6 GHz BAND

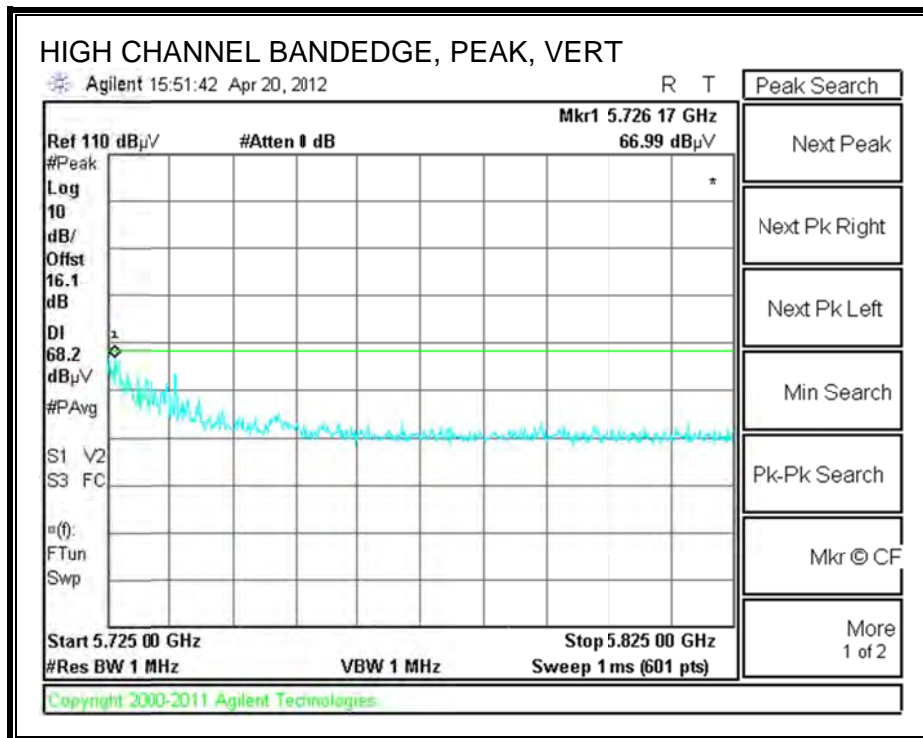
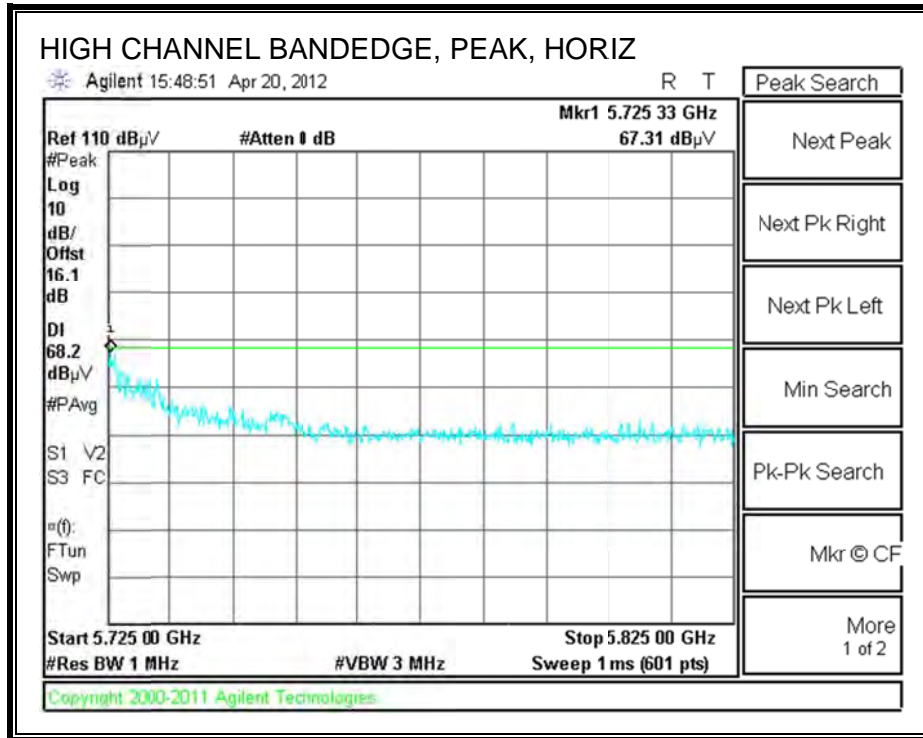
#### STANDARD COVER

#### RESTRICTED & AUTHORIZED BANDEDGE (LOW CHANNEL)





**AUTHORIZED BANDEDGE (HIGH CHANNEL)**



**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 5m Chamber

Test Engr: Chin Pang  
 Date: 04/20/12  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.407  
 Mode Oper: 5.5GHz band, HT20 mode, TX  
 Configuration: EUT(Standard Cover) and AC adapter

f Measurement Frequency Amp Preamp Gain Average Field Strength Limit  
 Dist Distance to Antenna D Corr Distance Correct to 3 meters Peak Field Strength Limit  
 Read Analyzer Reading Avg Average Field Strength @ 3 m Margin vs. Average Limit  
 AF Antenna Factor Peak Calculated Peak Field Strength Margin vs. Peak Limit  
 CL Cable Loss HPF High Pass Filter

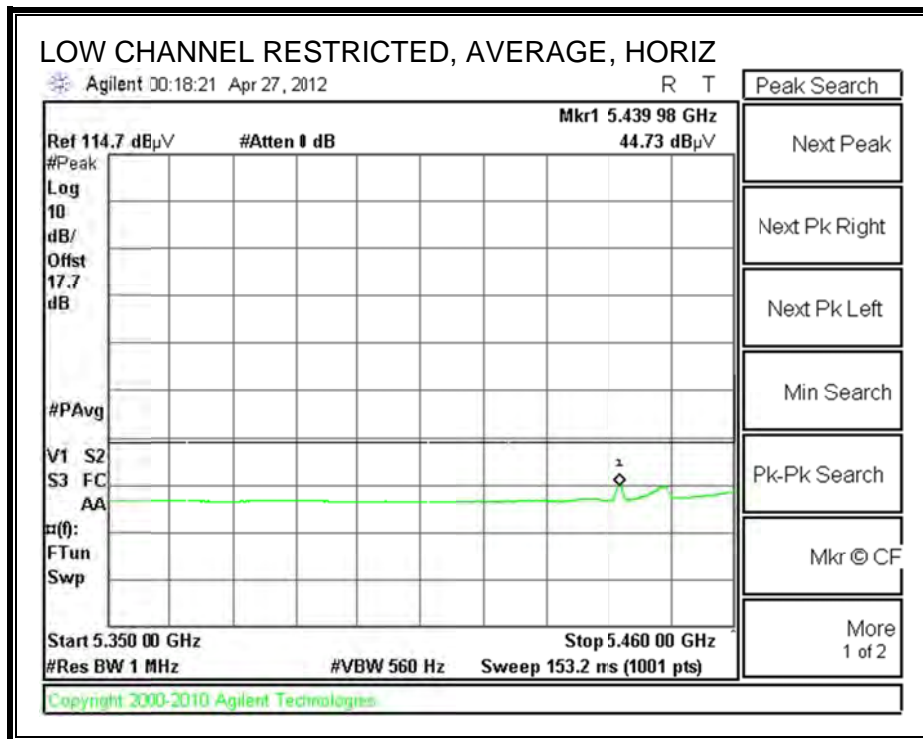
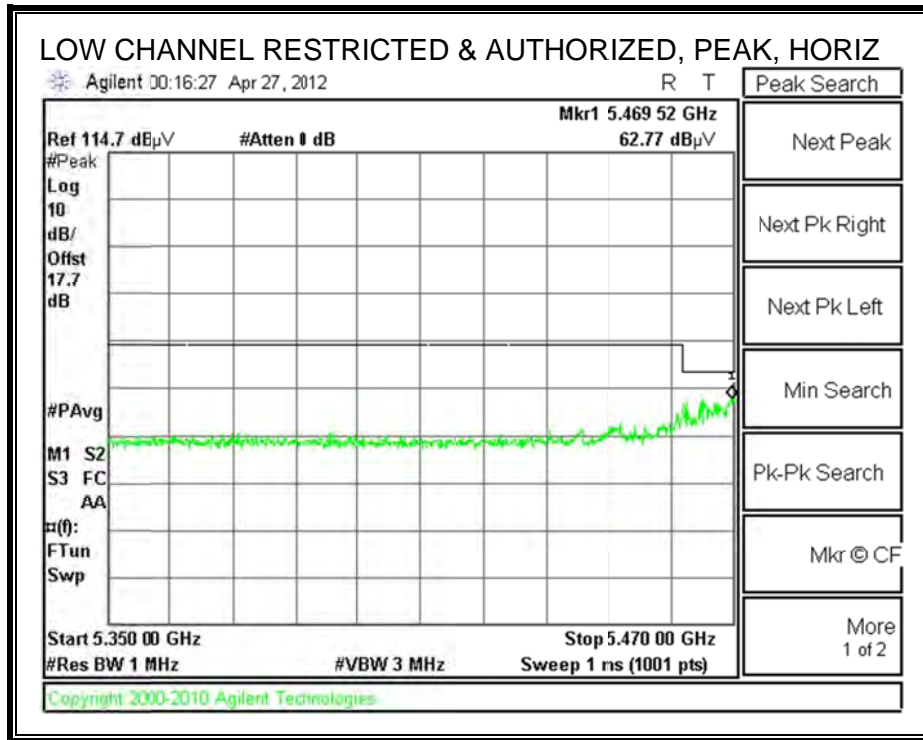
f GHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Filtr dB	Corr. dB	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
<b>Low Ch, 5500MHz</b>													
11.000	3.0	34.8	38.4	10.2	-35.6	0.0	0.7	48.5	74.0	-25.5	V	P	
11.000	3.0	25.0	38.4	10.2	-35.6	0.0	0.7	38.7	54.0	-15.3	V	A	
11.000	3.0	38.3	38.4	10.2	-35.6	0.0	0.7	51.9	74.0	-22.1	H	P	
11.000	3.0	31.8	38.4	10.2	-35.6	0.0	0.7	45.4	54.0	-8.6	H	A	
<b>Mid Ch, 5580MHz</b>													
11.160	3.0	34.4	38.5	10.3	-35.6	0.0	0.7	48.4	74.0	-25.6	V	P	
11.160	3.0	23.9	38.5	10.3	-35.6	0.0	0.7	37.8	54.0	-16.2	V	A	
11.160	3.0	36.5	38.5	10.3	-35.6	0.0	0.7	50.4	74.0	-23.6	H	P	
11.160	3.0	29.2	38.5	10.3	-35.6	0.0	0.7	43.1	54.0	-10.9	H	A	
<b>High Ch, 5700MHz</b>													
11.400	3.0	34.9	38.7	10.6	-35.6	0.0	0.7	49.4	74.0	-24.6	V	P	
11.400	3.0	25.5	38.7	10.6	-35.6	0.0	0.7	40.0	54.0	-14.0	V	A	
11.400	3.0	35.7	38.7	10.6	-35.6	0.0	0.7	50.2	74.0	-23.8	H	P	
11.400	3.0	26.2	38.7	10.6	-35.6	0.0	0.7	40.7	54.0	-13.3	H	A	

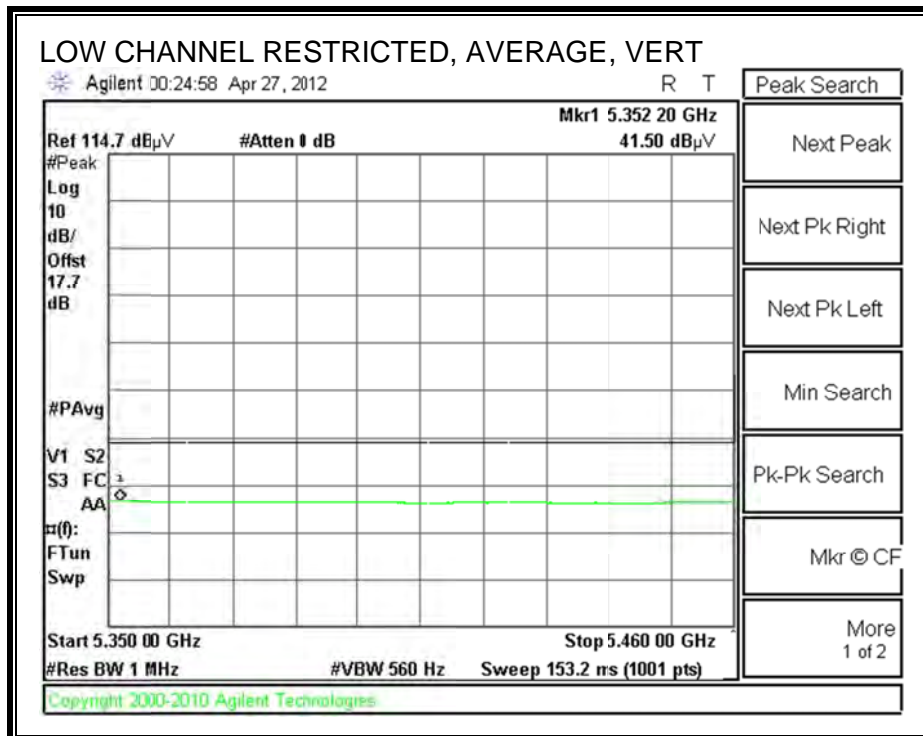
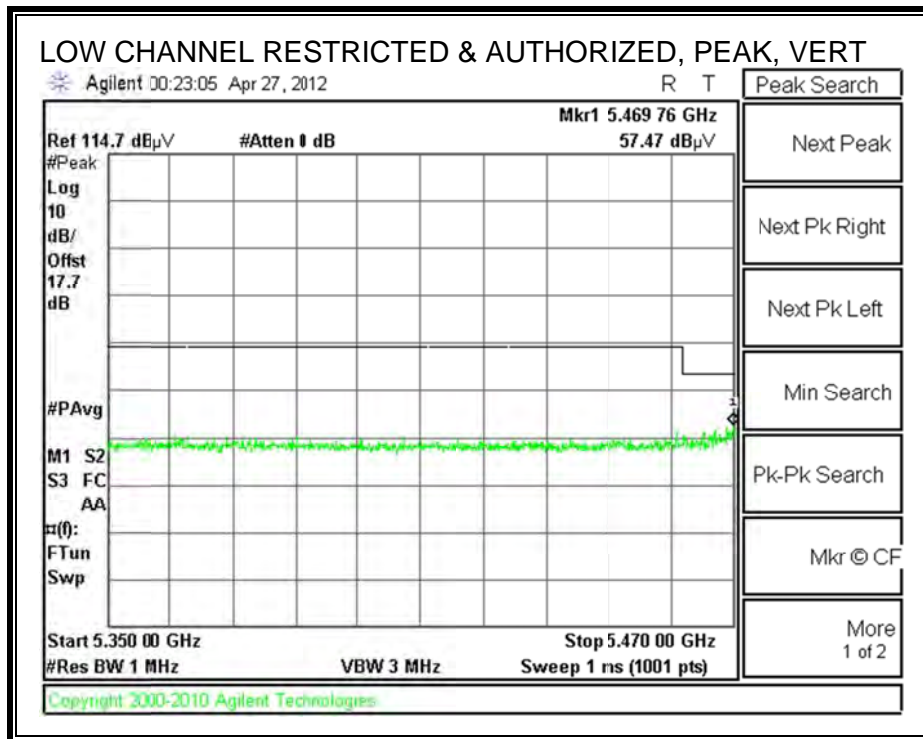
Rev. 4.12.7

Note: No other emissions were detected above the system noise floor.

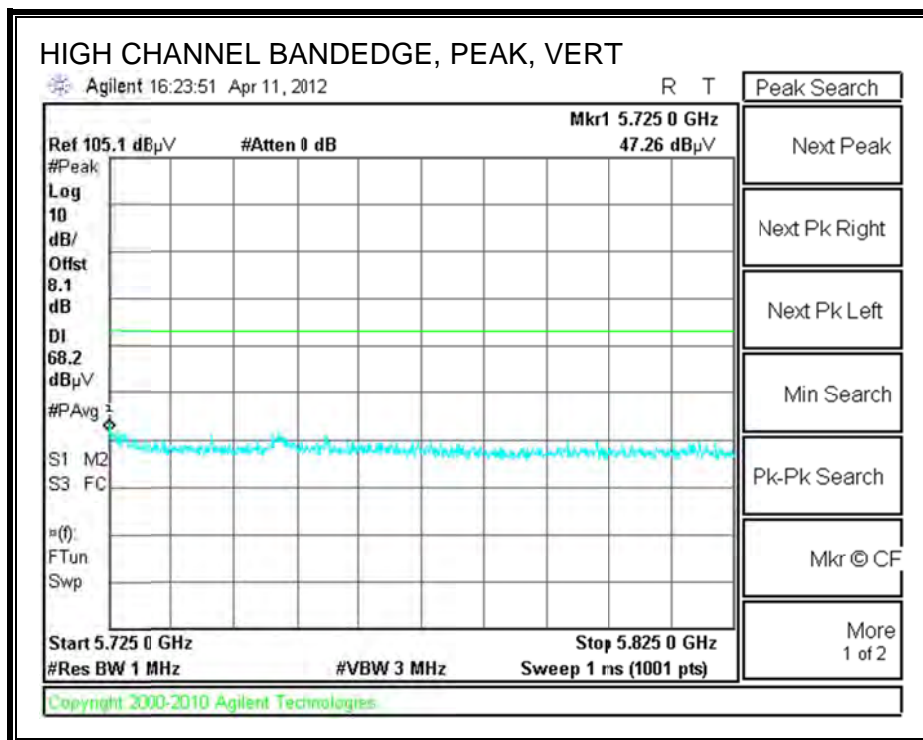
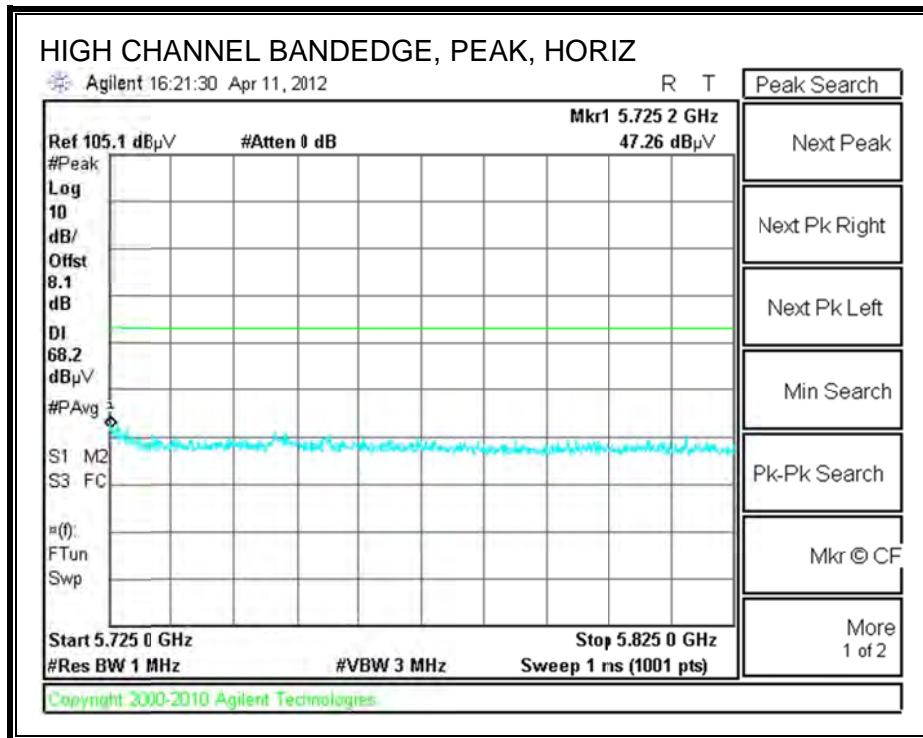
**INDUCTIVE COVER**

**RESTRICTED & AUTHORIZED BANEDGE (LOW CHANNEL)**





**AUTHORIZED BANDEDGE (HIGH CHANNEL)**





**HARMONICS AND SPURIOUS EMISSIONS**

High Frequency Measurement													
Compliance Certification Services, Fremont 5m A Chamber													
Test Engr:		Dennis Huang											
Date:		04/12/11											
Project #:		12U14331											
Company:		LG											
Test Target:		FCC 15.205											
Mode Oper:		802.11n HT20 Tx Mode (Inducting Case with NFC Loop Ant)											
f	Measurement Frequency	Amp	Preamp Gain					Average Field Strength Limit					
Dist	Distance to Antenna	D Corr	Distance Correct to 3 meters					Peak Field Strength Limit					
Read	Analyzer Reading	Avg	Average Field Strength @ 3 m					Margin vs. Average Limit					
AF	Antenna Factor	Peak	Calculated Peak Field Strength					Margin vs. Peak Limit					
CL	Cable Loss	HPF	High Pass Filter										

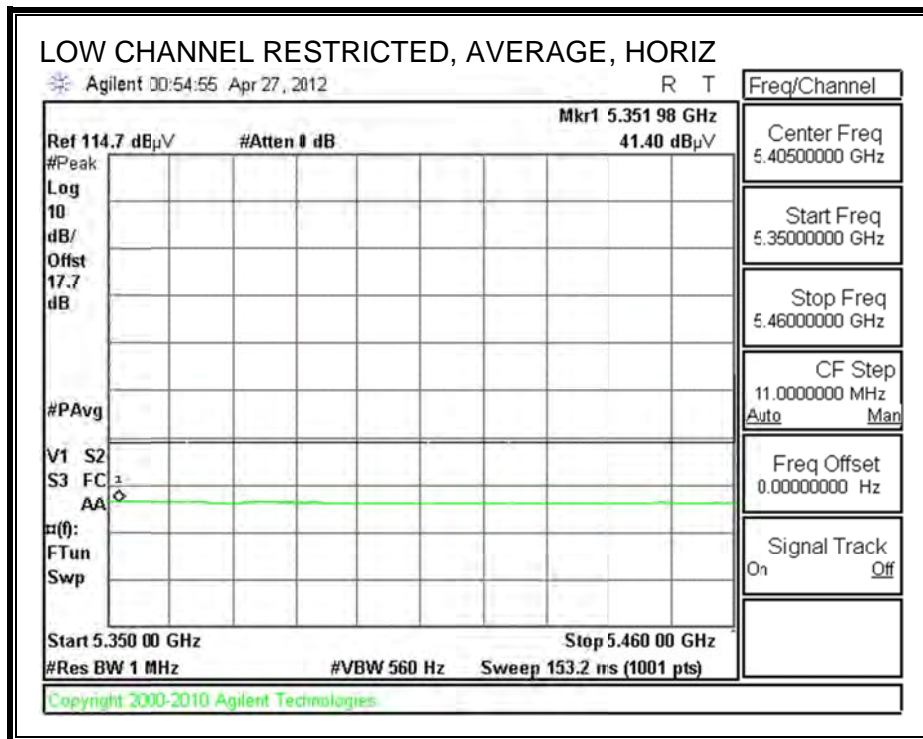
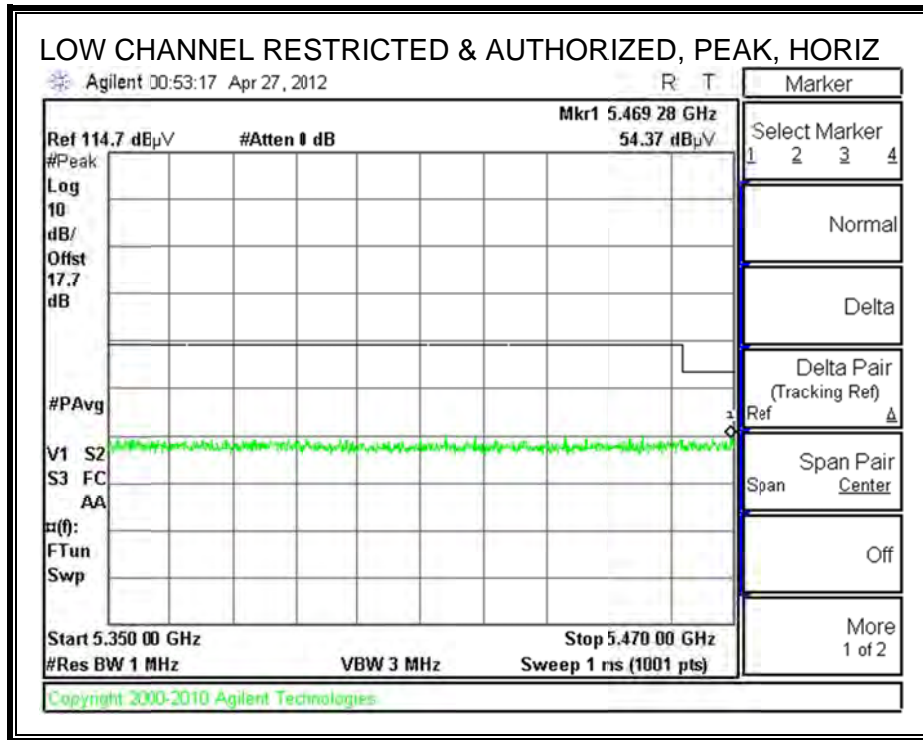
  

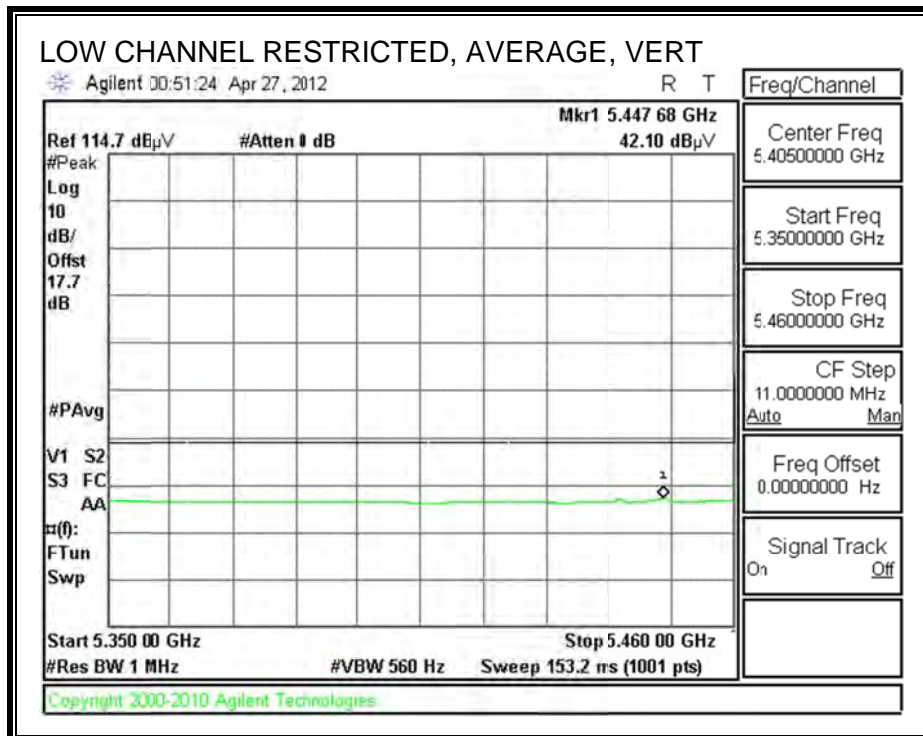
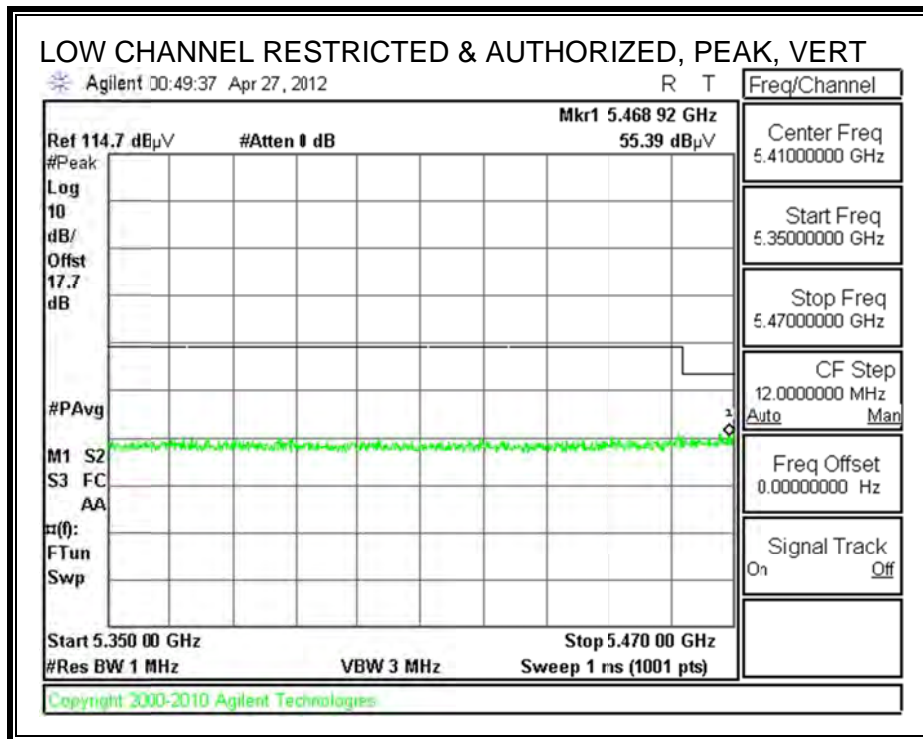
f	Dist	Read	AF	CL	Amp	D Corr	Filtr	Corr.	Limit	Margin	Ant. Pol.	Det.	Notes
GHz	(m)	dBuV	dB/m	dB	dB	dB	dB	dBuV/m	dBuV/m	dB	V/H	P/A/QP	
<b>Low Channel - 5500MHz</b>													
11.000	3.0	38.0	38.4	10.2	-35.6	0.0	0.7	51.7	74.0	-22.3	V	P	
11.000	3.0	30.3	38.4	10.2	-35.6	0.0	0.7	44.0	54.0	-10.0	V	A	
11.000	3.0	39.5	38.4	10.2	-35.6	0.0	0.7	53.1	74.0	-20.9	H	P	
11.000	3.0	33.1	38.4	10.2	-35.6	0.0	0.7	46.7	54.0	-7.3	H	A	
<b>Mid Channel - 5580MHz</b>													
11.160	3.0	39.2	38.5	10.3	-35.6	0.0	0.7	53.2	74.0	-20.8	V	P	
11.160	3.0	31.4	38.5	10.3	-35.6	0.0	0.7	45.4	54.0	-8.6	V	A	
11.160	3.0	38.4	38.5	10.3	-35.6	0.0	0.7	52.4	74.0	-21.6	H	P	
11.160	3.0	31.4	38.5	10.3	-35.6	0.0	0.7	45.4	54.0	-8.6	H	A	
<b>High Channel - 5700MHz</b>													
11.400	3.0	38.8	38.7	10.6	-35.6	0.0	0.7	53.3	74.0	-20.7	V	P	
11.400	3.0	30.9	38.7	10.6	-35.6	0.0	0.7	45.4	54.0	-8.6	V	A	
11.400	3.0	38.1	38.7	10.6	-35.6	0.0	0.7	52.6	74.0	-21.4	H	P	
11.400	3.0	31.9	38.7	10.6	-35.6	0.0	0.7	46.4	54.0	-7.6	H	A	

Rev. 4.12.7  
 Note: No other emissions were detected above the system noise floor.

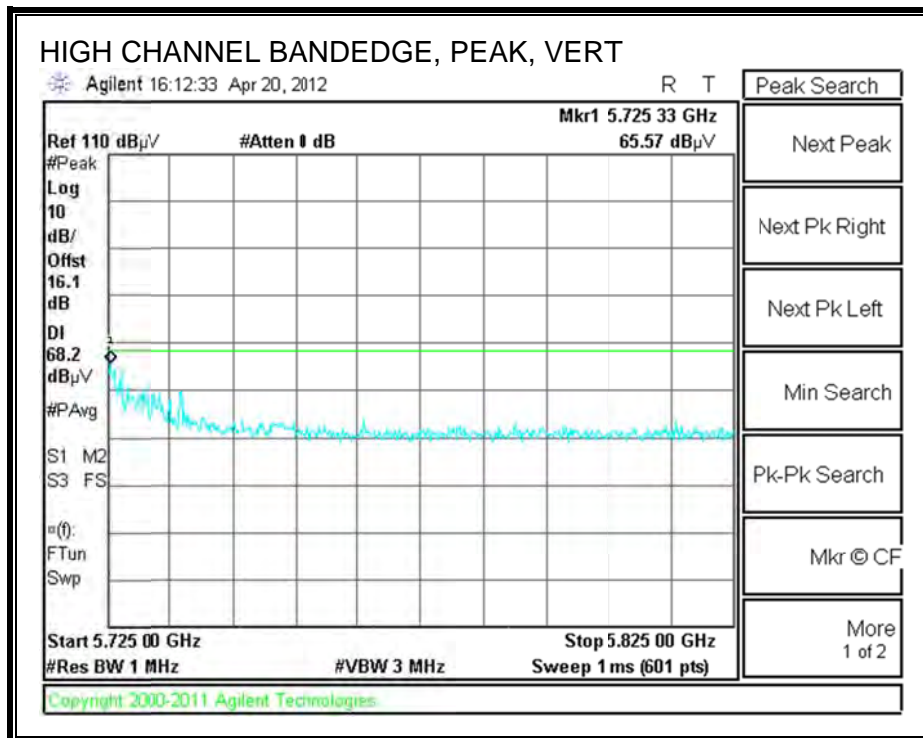
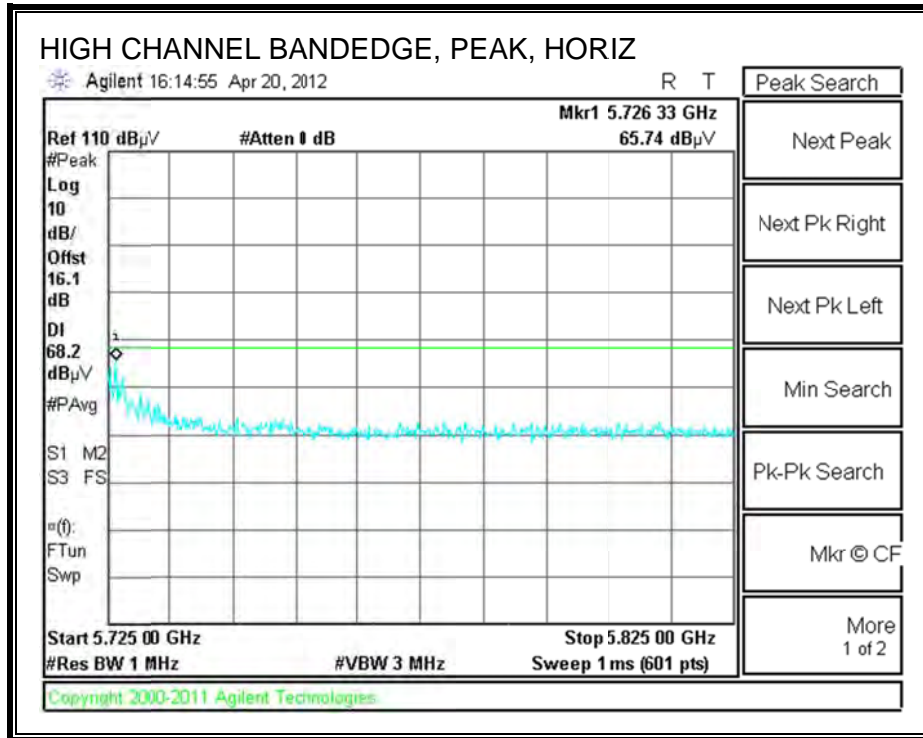
**ON INDUCTIVE CHARGER PAD**

**RESTRICTED & AUTHORIZED BANEDGE (LOW CHANNEL)**





**AUTHORIZED BANDEDGE (HIGH CHANNEL)**



**HARMONICS AND SPURIOUS EMISSIONS**

**High Frequency Measurement**  
 Compliance Certification Services, Fremont 5m Chamber

Test Engr: Chin Pang  
 Date: 04/20/12  
 Project #: 12U14331  
 Company: LG  
 Test Target: FCC 15.407  
 Configuration: EUT (On Inductive Charging Pad)  
 Mode Oper: 5.6GHz, HT20, TX (Worst Case)

f Measurement Frequency Amp Preamp Gain Average Field Strength Limit  
 Dist Distance to Antenna D Corr Distance Correct to 3 meters Peak Field Strength Limit  
 Read Analyzer Reading Avg Average Field Strength @ 3 m Margin vs. Average Limit  
 AF Antenna Factor Peak Calculated Peak Field Strength Margin vs. Peak Limit  
 CL Cable Loss HPF High Pass Filter

f CHz	Dist (m)	Read dBuV	AF dB/m	CL dB	Amp dB	D Corr dB	Ftr dB	Corr. dBuV/m	Limit dBuV/m	Margin dB	Ant. Pol. V/H	Det. P/A/QP	Notes
<b>Mid Ch, 5580MHz</b>													
11.160	3.0	34.0	38.5	10.3	-35.6	0.0	0.7	48.0	74.0	-26.0	V	P	
11.160	3.0	23.2	38.5	10.3	-35.6	0.0	0.7	37.2	54.0	-16.8	V	A	
11.160	3.0	34.7	38.5	10.3	-35.6	0.0	0.7	48.7	74.0	-25.3	H	P	
11.160	3.0	23.3	38.5	10.3	-35.6	0.0	0.7	37.2	54.0	-16.8	H	A	

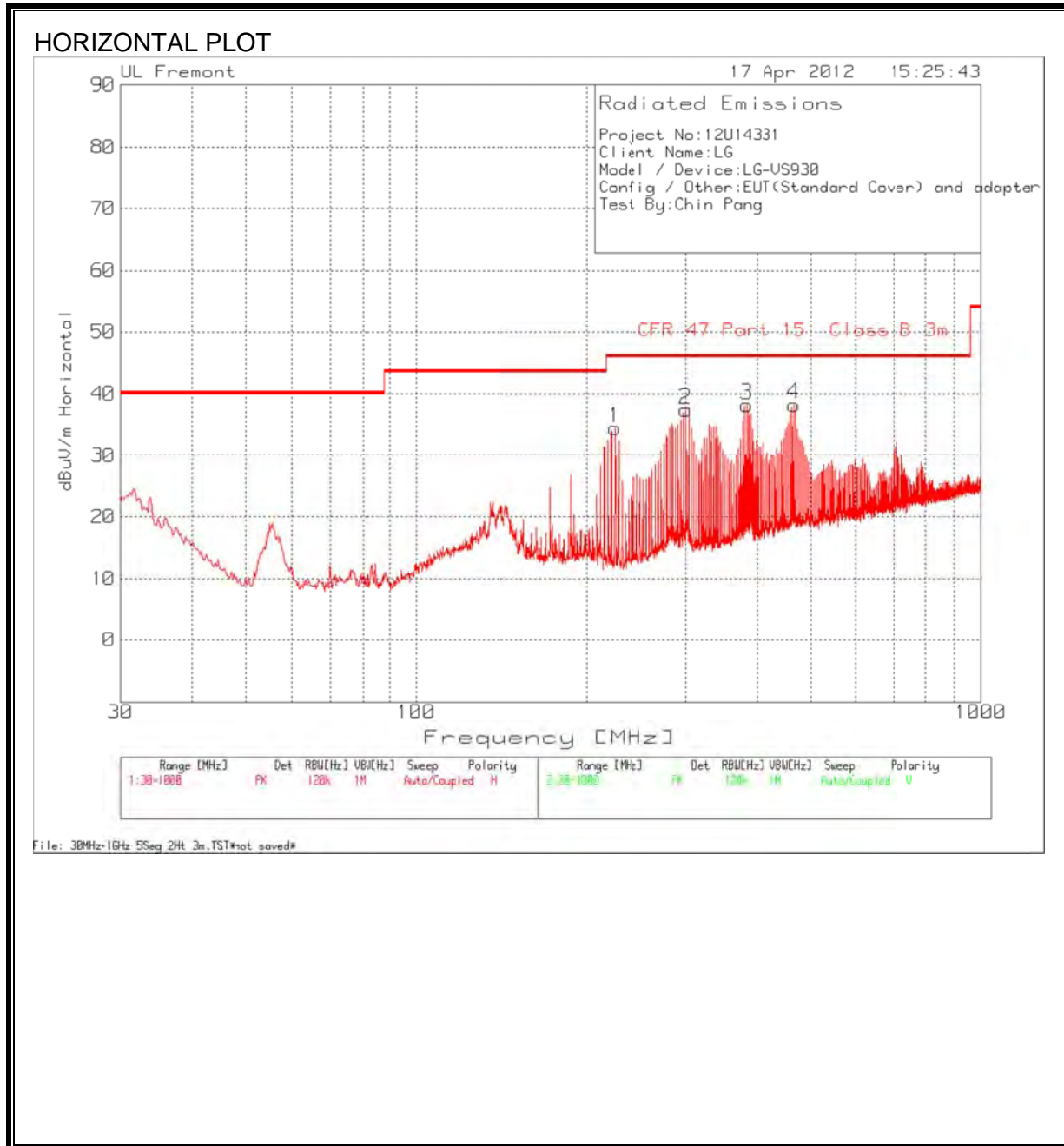
Rev. 4.1.2.7

Note: No other emissions were detected above the system noise floor.

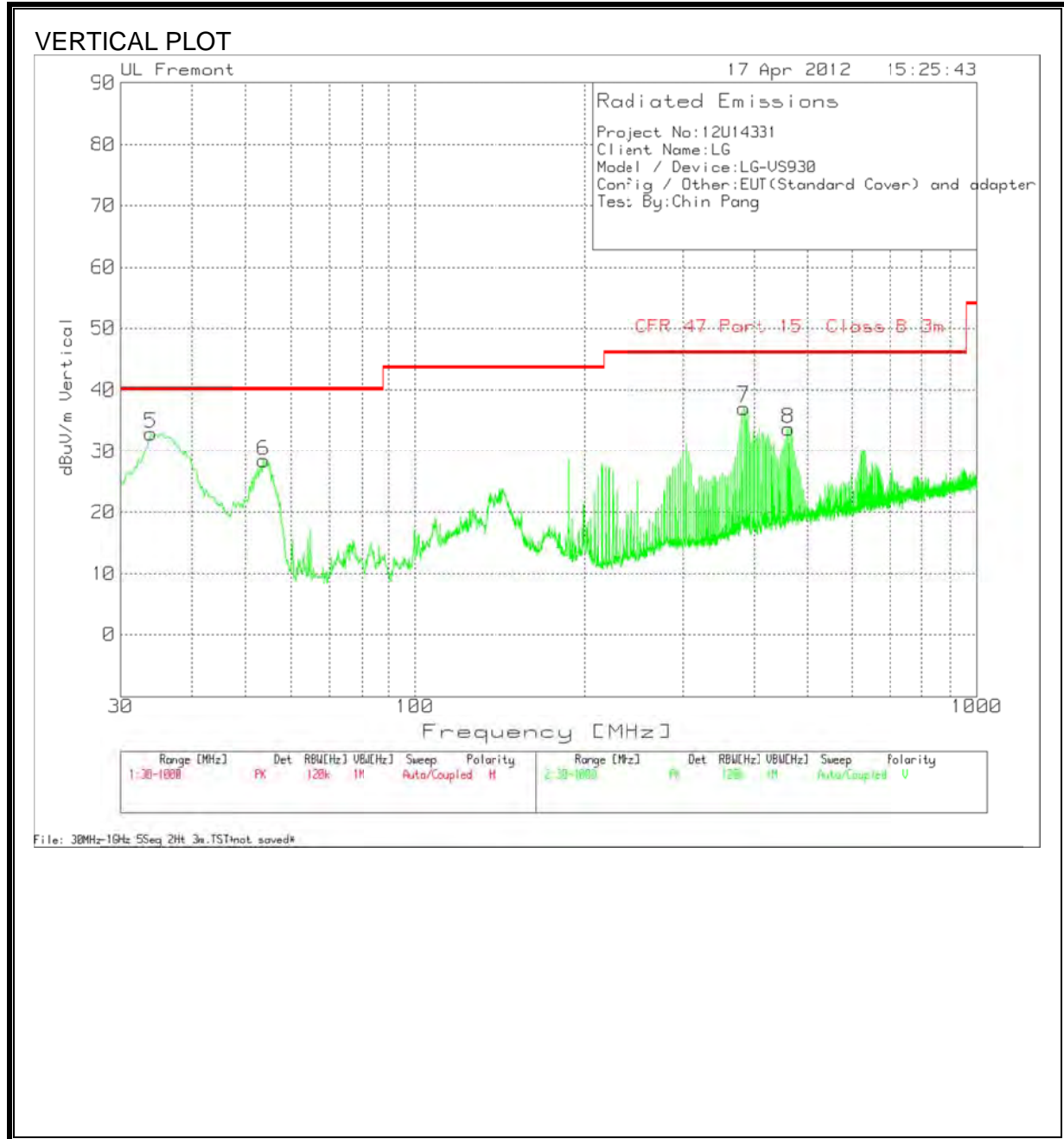
### 8.3. WORST-CASE BELOW 1 GHz

#### STANDARD COVER

#### SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)



**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)**



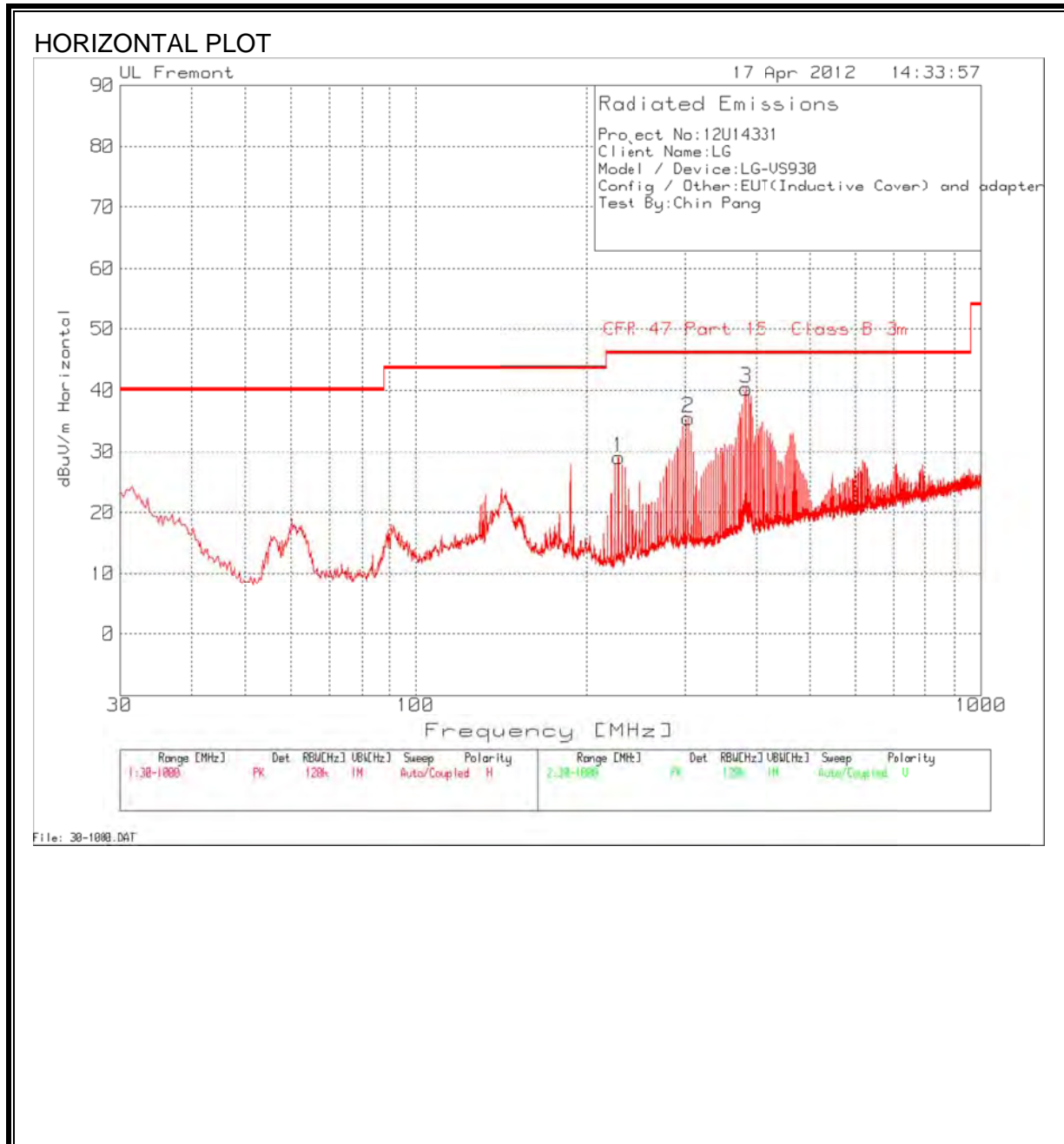
### HORIZONTAL AND VERTICAL DATA

Project No:12U14331									
Client Name:LG									
Model / Device:LG-VS930									
Config / Other:EUT(Standard Cover) and adapter									
Test By:Chin Pang									
Range 1 30 - 1000MHz									
Test Frequency	Meter Reading	Detector	25MHz-1GHz ChmbrA Amplified.TX [dB]	T243 Sunol Bilog.TXT [dB]	dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
223.8449	49.94	PK	-26	10.6	34.54	46	-11.46	100	Horz
300.8014	50.08	PK	-25.8	13.2	37.48	46	-8.52	100	Horz
383.9608	48.56	PK	-25.3	15	38.26	46	-7.74	100	Horz
467.3141	46.31	PK	-25.1	17.1	38.31	46	-7.69	200	Horz
Range 2 30 - 1000MHz									
Test Frequency	Meter Reading	Detector	25MHz-1GHz ChmbrA Amplified.TX [dB]	T243 Sunol Bilog.TXT [dB]	dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
33.8769	42.17	PK	-27.6	18.4	32.97	40	-7.03	109	Vert
53.8429	48.43	PK	-27.3	7.3	28.43	40	-11.57	109	Vert
383.9608	47.45	PK	-25.3	15	37.15	46	-8.85	109	Vert
464.0188	41.9	PK	-25	16.9	33.8	46	-12.2	109	Vert

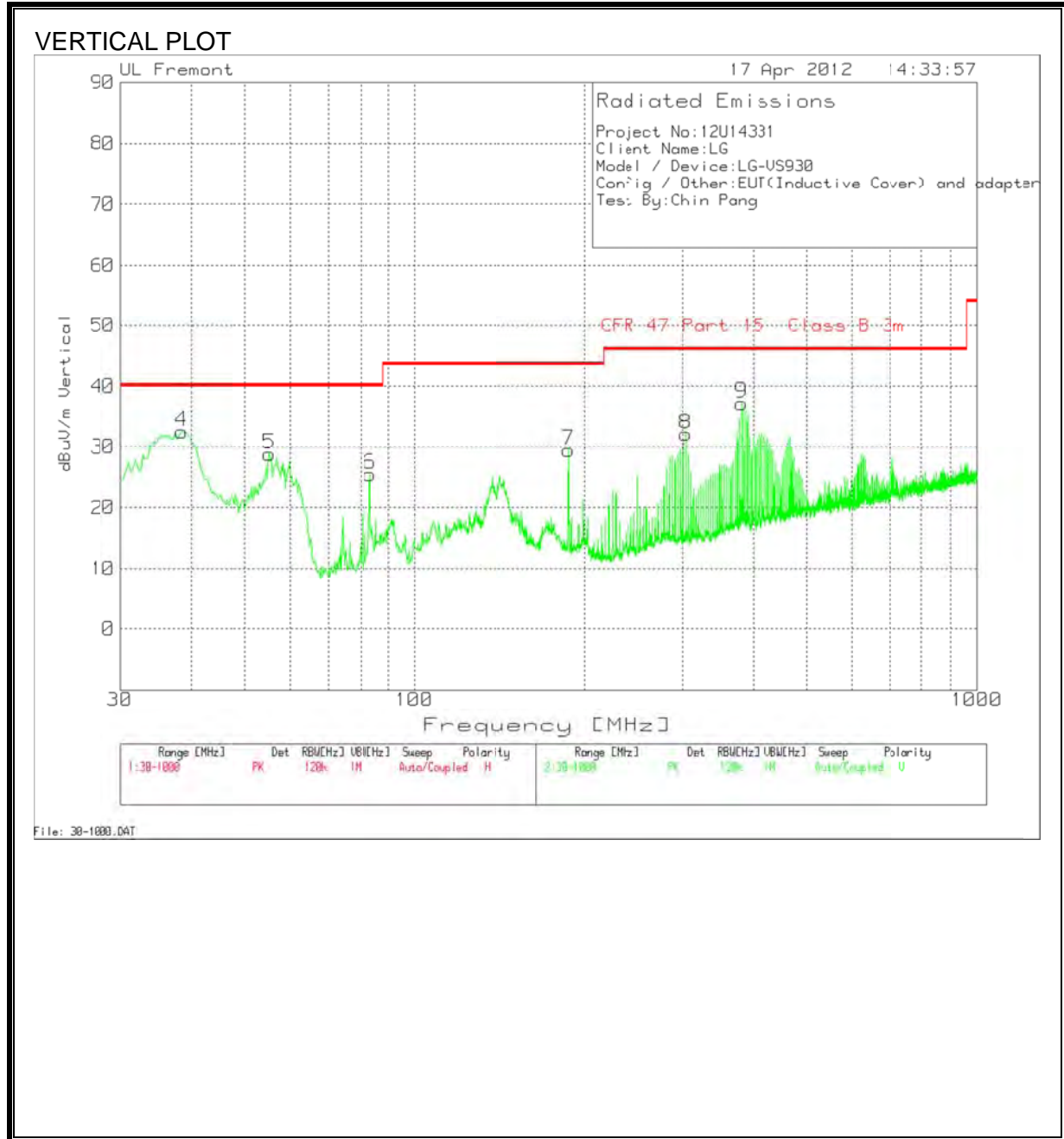


**INDUCTIVE COVER**

**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)**



**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)**

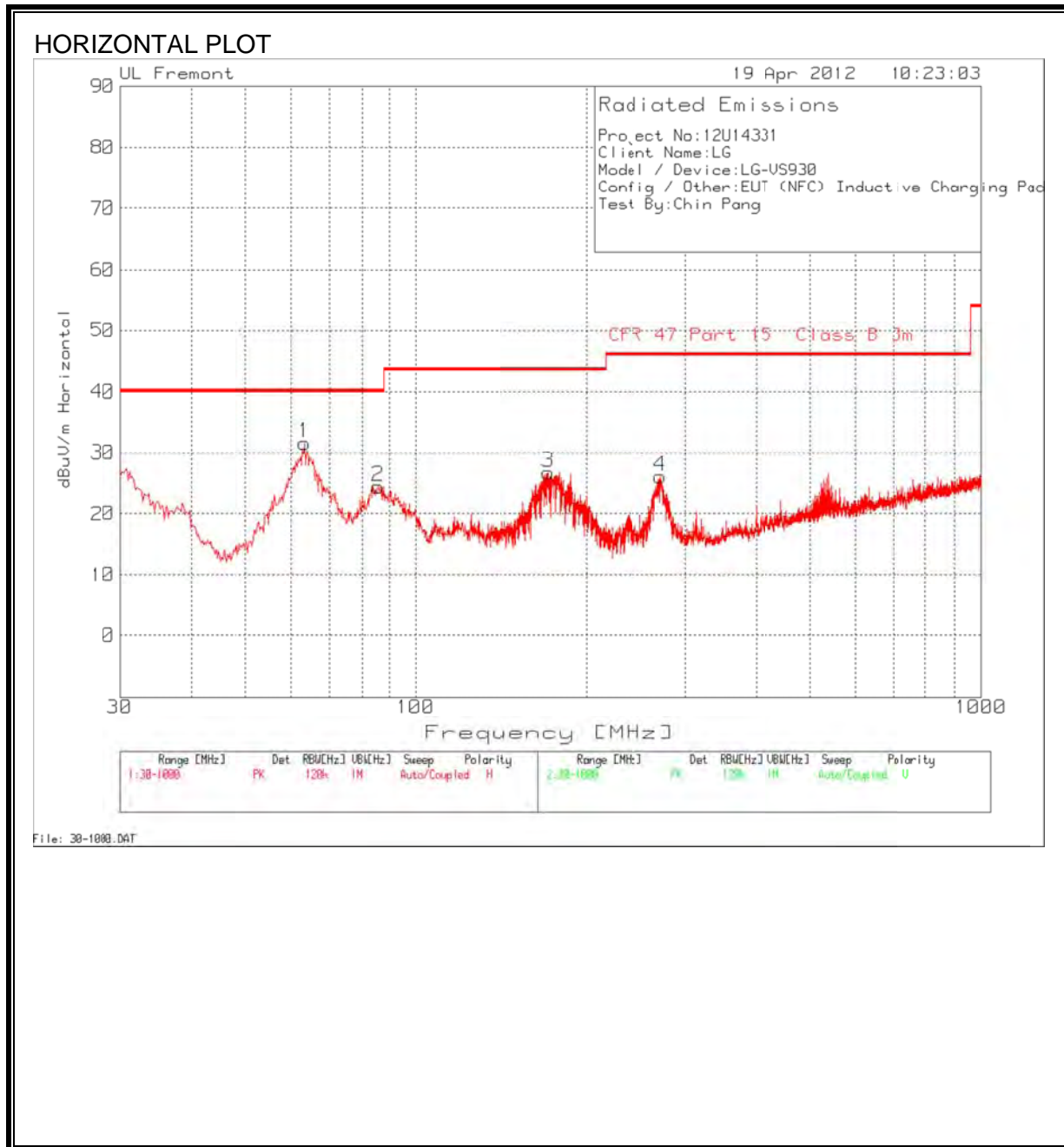


**HORIZONTAL AND VERTICAL DATA**

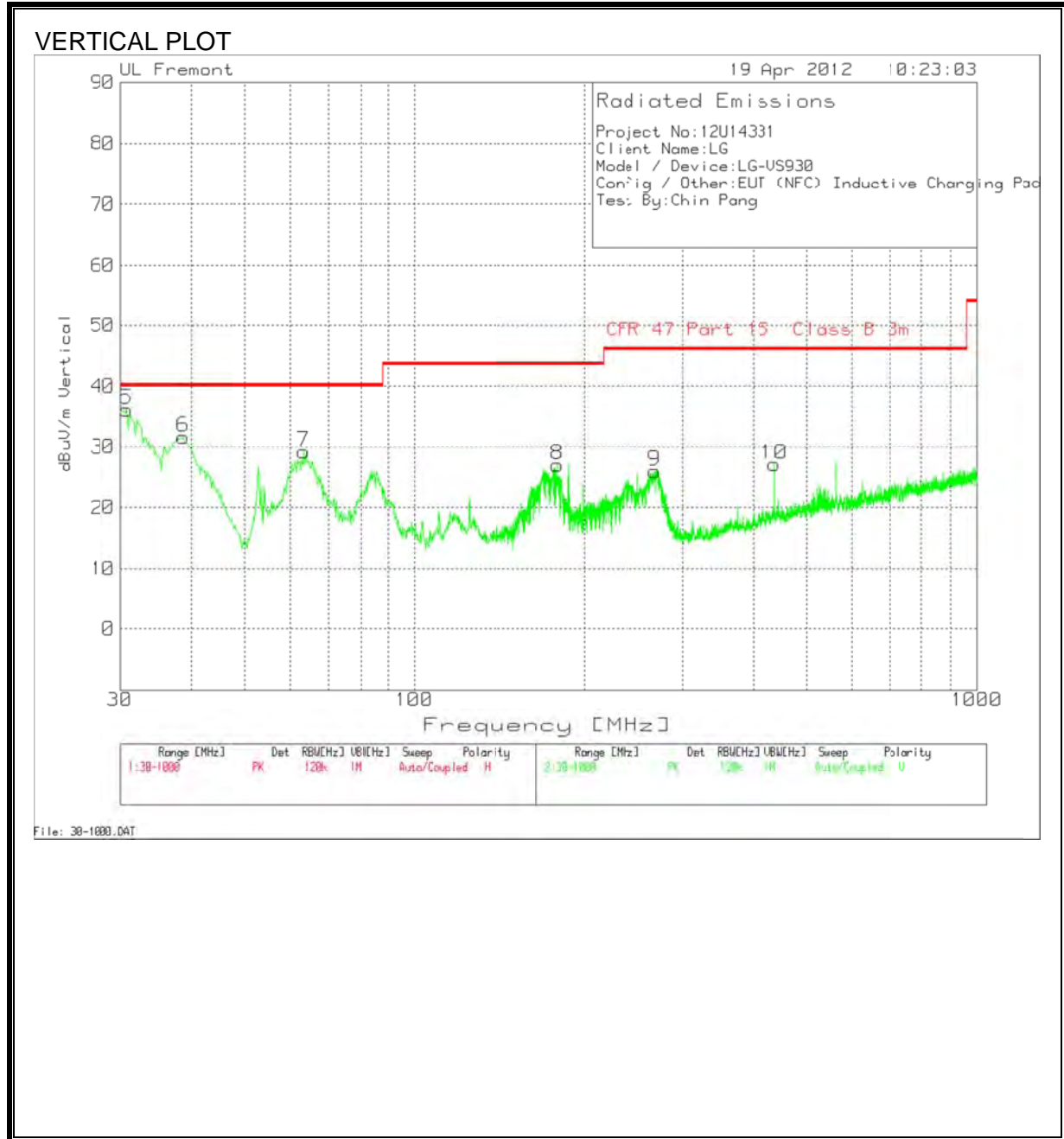
Project No:12U14331									
Client Name:LG									
Model / Device:LG-VS930									
Config / Other:EUT(Inductive Cover) and adapter									
Test By:Chin Pang									
Range 1 30 - 1000MHz									
Test Frequency	Meter Reading	Detector	25MHz-1GHz ChmbrA Amplified.TX [dB]	T243 Sunol Bilog.TXT [dB]	dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
227.3341	44.48	PK	-26.1	10.7	29.0	46	-16.92	91	Horz
303.9029	48.06	PK	-25.8	13.3	35.5	46	-10.44	91	Horz
383.9608	50.54	PK	-25.3	15	40.24	46	-5.76	91	Horz
Range 2 30 - 1000MHz									
Test Frequency	Meter Reading	Detector	25MHz-1GHz ChmbrA Amplified.TX [dB]	T243 Sunol Bilog.TXT [dB]	dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
38.5292	44.9	PK	-27.4	15	32.5	40	-7.5	100	Vert
55.1998	49	PK	-27.3	7.1	28.8	40	-11.2	200	Vert
83.5012	45	PK	-27	7.4	25.4	40	-14.6	200	Vert
187.4021	44.43	PK	-26.3	11.3	29.4	43.5	-14.07	200	Vert
303.9029	44.58	PK	-25.8	13.3	32.0	46	-13.92	100	Vert
380.6655	47.37	PK	-25.3	15.1	37.17	46	-8.83	100	Vert

**INDUCTIVE CHARGER PAD**

**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, HORIZONTAL)**



**SPURIOUS EMISSIONS 30 TO 1000 MHz (WORST-CASE CONFIGURATION, VERTICAL)**



**HORIZONTAL AND VERTICAL DATA**

Project No:12U14331  
 Client Name:LG  
 Model / Device:LG-VS930  
 Config / Other:EUT (NFC) Inductive Charging Pad  
 Test By:Chin Pang

**Range 1 30 - 1000MHz**

Test Frequency	Meter Reading	Detector	25MHz-1GHz ChmbrA Amplified.TX [dB]	T243 Sunol Bilog.TXT [dB]	dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
63.3413	51.23	PK	-27.2	7.6	31.63	40	-8.37	300	Horz
86.0212	44.01	PK	-27	7.4	24.41	40	-15.59	200	Horz
171.313	41.58	PK	-26.5	11.6	26.68	43.5	-16.82	200	Horz
271.7246	38.76	PK	-25.8	13.1	26.06	46	-19.94	100	Horz

**Range 2 30 - 1000MHz**

Test Frequency	Meter Reading	Detector	25MHz-1GHz ChmbrA Amplified.TX [dB]	T243 Sunol Bilog.TXT [dB]	dBuV/m	CFR 47 Part 15 Class B 3m	Margin	Height [cm]	Polarity
30.7754	43.09	PK	-27.5	20.6	36.19	40	-3.81	100	Vert
30.7754	41.41	QP	-27.5	21.1	35.01	40	-4.99	242	Vert
38.723	44.18	PK	-27.4	14.9	31.64	40	-8.32	100	Vert
63.3413	48.79	PK	-27.2	7.6	29.19	40	-10.81	300	Vert
179.0667	42.13	PK	-26.4	11.2	26.93	43.5	-16.57	100	Vert
268.0416	38.8	PK	-25.8	12.9	25.9	46	-20.1	100	Vert
437.6559	35.63	PK	-25.3	16.7	27.03	46	-18.97	100	Vert