

## FCC CFR47 PART 15 SUBPART C

## BLUETOOTH LOW ENERGY C2PC CERTIFICATION TEST REPORT

**FOR** 

CDMA WATCH + Bluetooth, DTS b/g

MODEL NUMBER: LG-VC110, LGVC110, VC110, LG-VC110B, LGVC110B, VC110B

**FCC ID: ZNFVC110** 

**REPORT NUMBER: 15I21553-E3V1** 

**ISSUE DATE: SEPTEMBER 28, 2015** 

Prepared for

LG ELECTRONICS MOBILECOMM U.S.A., INC 1000 SYLVAN AVENUE ENGLEWOOD CLIFFS, NEW JERSEY, 07632, U.S.A

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REPORT NO: 15I21553-E3V1 DATE: SEPTEMBER 28, 2015 FCC ID: ZNFVC110

MODEL NUMBER: LG-VC110 LGVC110, VC110, LG-VC110B, LGVC110B, VC110B

## **Revision History**

	Issue		
Rev.	Date	Revisions	Revised By
V1	9/28/15	Initial Issue	

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REPORT NO: 15I21553-E3V1 DATE: SEPTEMBER 28, 2015

MODEL NUMBER: LG-VC110 LGVC110, VC110, LG-VC110B, LGVC110B, VC110B FCC ID: ZNFVC110

## 1. ATTESTATION OF TEST RESULTS

**COMPANY NAME:** LG ELECTRONICS MOBILECOMM U.S.A., INC.

**EUT DESCRIPTION:** CDMA WATCH + Bluetooth, DTS b/g

MODEL: LG-VC110, LGVC110, VC110, LG-VC110B, LGVC110B, VC110B

SERIAL NUMBER: 20KFP (Conducted), 23F9Z (Radiated)

**DATE TESTED:** September 14-15, 2015

#### **APPLICABLE STANDARDS**

STANDARD TEST RESULTS

CFR 47 Part 15 Subpart C 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.

REPORT NO: 15I21553-E3V1 DATE: SEPTEMBER 28, 2015 FCC ID: ZNFVC110

MODEL NUMBER: LG-VC110 LGVC110, VC110, LG-VC110B, LGVC110B, VC110B

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REPORT NO: 15I21553-E3V1 DATE: SEPTEMBER 28, 2015 FCC ID: ZNFVC110

MODEL NUMBER: LG-VC110 LGVC110, VC110, LG-VC110B, LGVC110B, VC110B

## 2. TEST METHODOLOGY

The tests documented in this report were performed in accordance with FCC CFR 47 Part 2, FCC CFR 47 Part 15, and KDB 558074 D01 v03r03, ANSI C63.10-2009 for FCC.

#### ANSI C63.10-2009 Deviation

Radiated spurious emission above 1GHz was performed with the EUT elevated at 1.5m instead of 0.8m. 1.5m is the required height in ANSI C63.10:2013.

## 3. FACILITIES AND ACCREDITATION

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(IC: 2324B-1)	Chamber D(IC: 2324B-4)
Chamber B(IC: 2324B-2)	Chamber E(IC: 2324B-5)
Chamber C(IC: 2324B-3)	Chamber F(IC: 2324B-6)
	Chamber G(IC: 2324B-7)
	Chamber H(IC: 2324B-8)

UL Verification Services Inc. is accredited by NVLAP, Laboratory Code 200065-0. The full scope of accreditation can be viewed at <a href="http://ts.nist.gov/standards/scopes/2000650.htm">http://ts.nist.gov/standards/scopes/2000650.htm</a>.

## 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.

#### SAMPLE CALCULATION 4.2.

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

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## 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 18000 MHz	4.94 dB

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

## 5. EQUIPMENT UNDER TEST

## 5.1. DESCRIPTION OF EUT

The EUT is CDMA WATCH + Bluetooth, DTS b/g.

## 5.2. MAXIMUM OUTPUT POWER

The transmitter has a maximum peak conducted output power as follows:

Frequency	Mode	Output Power	Output Power
Range		(dBm)	(mW)
(MHz)			
2402-2480	BLE	7.90	6.17

## 5.3. DESCRIPTION OF AVAILABLE ANTENNAS

The radio utilizes an LMA antenna, with a maximum gain of -0.14dBi.

## 5.4. WORST-CASE CONFIGURATION AND MODE

Radiated emission below 1 GHz and power line conducted emission were performed with the EUT set to transmit at the channel with highest output power as worst-case scenario.

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

## 5.5. DESCRIPTION OF TEST SETUP

## **SUPPORT EQUIPMENT**

Support Equipment List							
Description	Description Manufacturer Model Serial Number FCC ID						
AC Adapter	LG	MCS-02WD	DZ480000582	N/A			

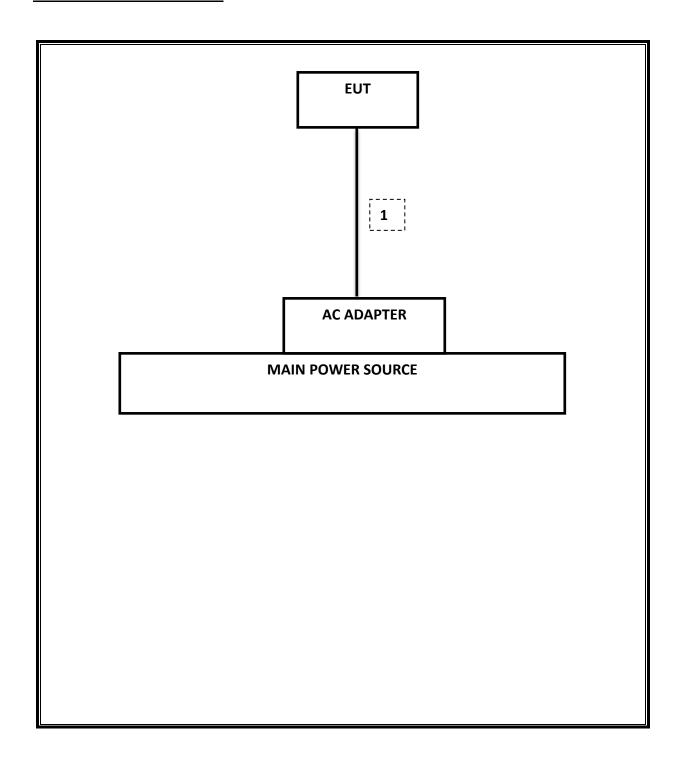
## **I/O CABLES**

	I/O Cable List					
Cable No		# of identical ports	Connector Type	Cable Type	Cable Length (m)	Remarks
		ports	· ypc		Length (m)	

## **TEST SETUP**

EUT was set in the Hidden menu mode to enable BLE communications.

## **SETUP DIAGRAM FOR TESTS**



## **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	
Spectrum Analyzer, 44 GHz	Agilent / HP	E4446A	C01069	12/20/15	
Spectrum Analyzer,9KHz-40GHz	HP	8564E	C00986	04/01/16	
Peak Power Meter	Agilent / HP	E4416A	C00963	12/13/15	
Peak / Average Power Sensor	Agilent / HP	E9327A	C00964	12/13/15	
Antenna, Horn, 1-18 GHz	ETS	3117	C01022	02/21/16	
Antenna, Horn,18- 26 GHz	ARA	MWH-1826/B	C00946	11/12/15	
Antenna, Horn, 26-40 GHz	ARA	MWH-2640/B	T446	05/12/16	
Antenna, Bilog, 30MHz-1 GHz	Sunol Sciences	JB1	T243	03/06/16	
RF Preamplifier, 1GHz - 18GHz	Miteq	NSP4000-SP2	924343	03/23/16	
RF Preamplifier, 1GHz - 26.5GHz	HP	8449B	F00351	06/27/15	
AC Power Supply, 2,500VA 45-500Hz	Elgar-Ametek	CW2501M	F00013	CNR	
RF Preamplifier, 1GHz - 40GHz	Miteq	NSP4000-SP2	C00990	08/20/15	
Attenuator / Switch driver	HP	11713A	F00204	CNR	
Low Pass Filter 5GHz	Micro-Tronics	LPS17541	F00219	05/23/16	
High Pass Filter 6GHz	Micro-Tronics	HPS17542	F00222	05/22/16	
High Pass Filter 3GHz	Micro-Tronics	HPM17543	F00224	05/22/16	

Test Software List						
Description	Manufacturer	Model	Version			
Radiated Software	UL	UL EMC	Version 9.5, 07/22/14			
Conducted Software	UL	UL EMC	Version 9.5, 05/17/14			
CLT Software	UL	UL RF	Version 1.0, 02/02/15			
Antenna Port Software	UL	UL RF	Version 2.1.1.1, 1/20/15			

## 7. ON TIME, DUTY CYCLE AND MEASUREMENT METHODS

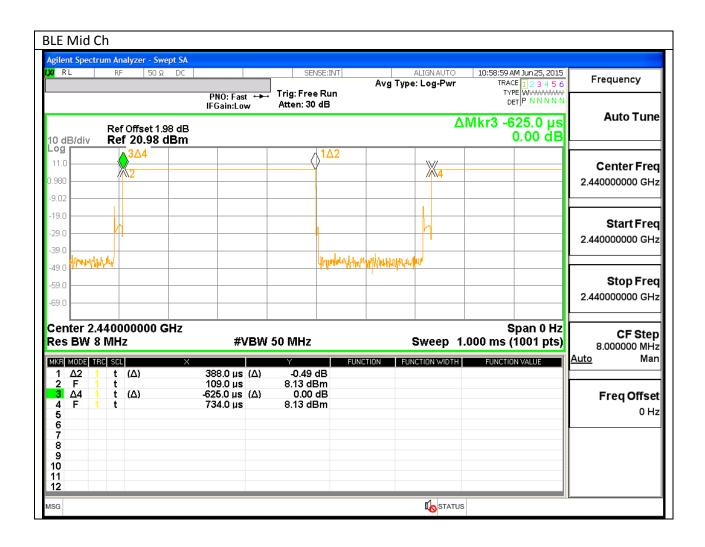
## **LIMITS**

None; for reporting purposes only.

#### **PROCEDURE**

KDB 558074 Zero-Span Spectrum Analyzer Method.

Mode	<b>ON Time</b>	Period	<b>Duty Cycle</b>	Duty	Duty Cycle	1/B
	В		х	Cycle	<b>Correction Factor</b>	Minimum VBW
	, ,	, ,	/1.	1011	( 15)	(1)
	(msec)	(msec)	(linear)	(%)	(dB)	(kHz)



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## 8. SUMMARY TABLE

C2PC Reason: Please see LG-VC110 FCC Class II change description for details.

FCC Part Section	RSS Section(s)	Test Description	Test Limit	Test Condition	Test Result	Worst Case
15.247 (a)(2)	RSS-247 5.2.1	Occupied Band width (6dB)	>500KHz		Pass	See Original
2.1051, 15.247 (d)	RSS-247 5.5	Band Edge / Conducted Spurious Emission	-20dBc	Conducted	Pass	See Original
15.247	RSS-247 5.4.4	TX conducted output power	<30dBm	Conducted	Pass	See Original
15.247	RSS-247 5.2.2	PSD	<8dBm		Pass	See Original
15.207 (a)	RSS-GEN 8.8	AC Power Line conducted emissions	Section 10	Radiated	Pass	See Original
15.205, 15.209	RSS-GEN 8.9/7	Radiated Spurious Emission	< 54dBuV/m	Radiated	Pass	45.8 dBuV/m

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## 9. RADIATED TEST RESULTS 9.1. LIMITS AND PROCEDURE

## **LIMITS**

FCC §15.205 and §15.209

Frequency Range	Field Strength Limit	Field Strength Limit
(MHz)	(uV/m) at 3 m	(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 for below 1GHz and 150 cm for above 1GHz. The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

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, then the video bandwidth is set to 1 MHz for peak measurements and add duty cycle factor for average measurements. Duty cycle factor =  $10 \log (1/x)$ . For this sample: DCF =  $10 \log (1/0.621)$ = 2.07 dB

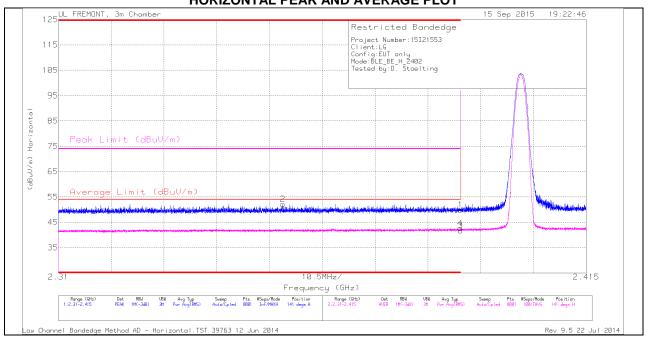
The spectrum from 30 MHz to 26 GHz is investigated with the transmitter set to the lowest, middle, and highest channels in the 2.4 GHz band.

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.

# 9.2. TRANSMITTER ABOVE 1 GHz RESTRICTED BANDEDGE (LOW CHANNEL)

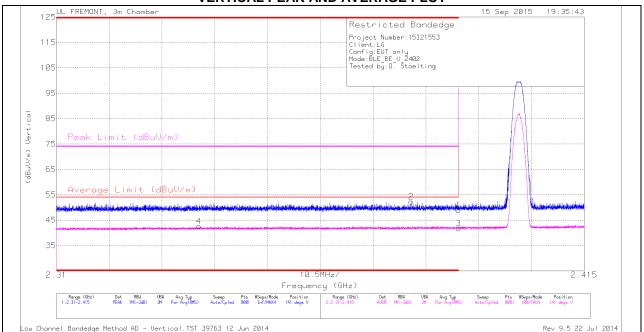
#### HORIZONTAL PEAK AND AVERAGE PLOT



#### **HORIZONTAL DATA**

	Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
	2	* 2.355	42.73	PK	31.8	-22.4	0	52.13	-	-	74	-21.87	141	291	Н
Γ	1	* 2.39	40.31	PK	32	-22.4	0	49.91	-	-	74	-24.09	141	291	Н
Γ	3	* 2.39	29.91	RMS	32	-22.4	2.07	41.58	54	-12.42	-	-	141	291	Н
	4	* 2.39	30.76	RMS	32	-22.4	2.07	42.43	54	-11.57	-	-	141	291	Н

## **VERTICAL PEAK AND AVERAGE PLOT**

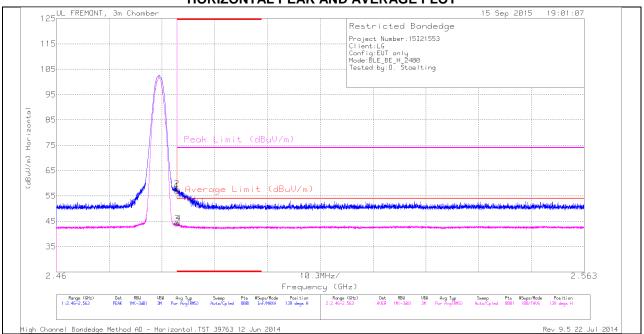


#### **VERTICAL DATA**

Marke	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	* 2.338	30.95	RMS	31.8	-22.4	2.07	42.42	54	-11.58	-	-	141	291	V
2	* 2.381	42.81	PK	31.9	-22.4	0	52.31	-	-	74	-21.69	141	291	V
1	* 2.39	39.27	PK	32	-22.4	0	48.87	-	-	74	-25.13	141	291	V
3	* 2.39	29.87	RMS	32	-22.4	2.07	41.54	54	-12.46	-	-	141	291	V

## **AUTHORIZED BANDEDGE (HIGH CHANNEL)**

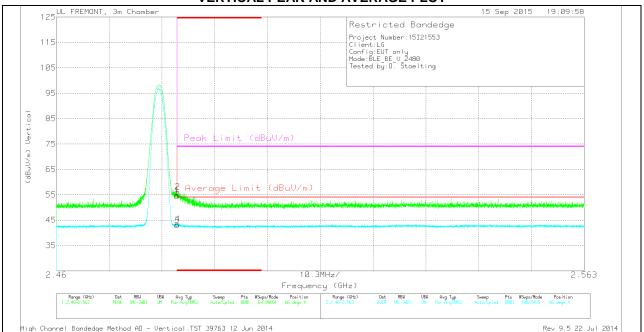
## HORIZONTAL PEAK AND AVERAGE PLOT



#### **HORIZONTAL DATA**

	Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
	1	* 2.484	46.8	PK	32.3	-22.1	0	57	-	-	74	-17	139	311	Н
Ī	2	* 2.484	47.62	PK	32.3	-22.1	0	57.82	-	-	74	-16.18	139	311	Н
Ī	3	* 2.484	31.62	RMS	32.3	-22.1	2.07	43.89	54	-10.11	-	-	139	311	Н
	4	* 2.484	31.83	RMS	32.3	-22.1	2.07	44.10	54	-9.90	-	-	139	311	Н

## **VERTICAL PEAK AND AVERAGE PLOT**

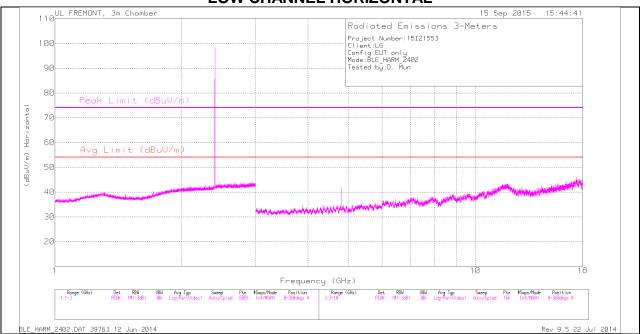


#### **VERTICAL DATA**

Marker	Frequency (GHz)	Meter Reading (dBuV)	Det	AF T119 (dB/m)	Amp/Cbl/Fit r/Pad (dB)	DC Corr (dB)	Corrected Reading (dBuV/m)	Average Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
1	* 2.484	44.44	PK	32.3	-22.1	0	54.64	-	-	74	-19.36	66	309	V
2	* 2.484	45.88	PK	32.3	-22.1	0	56.08	-	-	74	-17.92	66	309	V
3	* 2.484	30.51	RMS	32.3	-22.1	2.07	42.78	54	-11.22	-	-	66	309	V
4	* 2.484	31.09	RMS	32.3	-22.1	2.07	43.36	54	-10.64	-	-	66	309	V

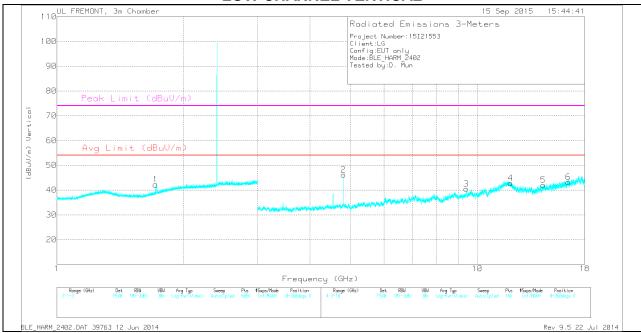
## **HARMONICS AND SPURIOUS EMISSIONS**

## LOW CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## **LOW CHANNEL VERTICAL**



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## **LOW CHANNEL DATA**

## TRACE MARKERS

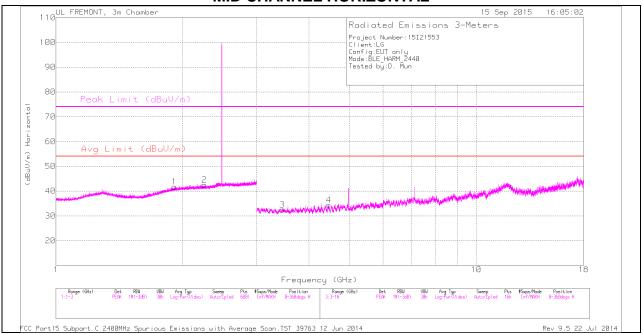
Marker	Frequency	Meter	Det	AF T119	Amp/Cbl/Fltr	DC Corr (dB)	Corrected	Avg Limit	Margin	Peak Limit	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading		(dB/m)	/Pad (dB)		Reading	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(Degs)	(cm)	
		(dBuV)					(dBuV/m)							
1	1.717	35.79	PK	29.2	-22.8	0	42.19	-	-	-	-	0-360	100	V
2	4.805	41.64	PK	34	-29.4	0	46.24	-	-	74	-27.76	0-360	200	V
3	9.41	28.12	PK	36.4	-24.1	0	40.42	-	-	74	-33.58	0-360	200	V
4	11.987	26.62	PK	39.1	-22.9	0	42.82	-	-	74	-31.18	0-360	100	V
5	14.335	28.05	PK	39.4	-25.4	0	42.05	-	-	-	-	0-360	100	V
6	16.444	26.64	PK	40.8	-24.2	0	43.24	-	-	-	-	0-360	100	V

PK - Peak detector

#### RADIATED EMISSIONS

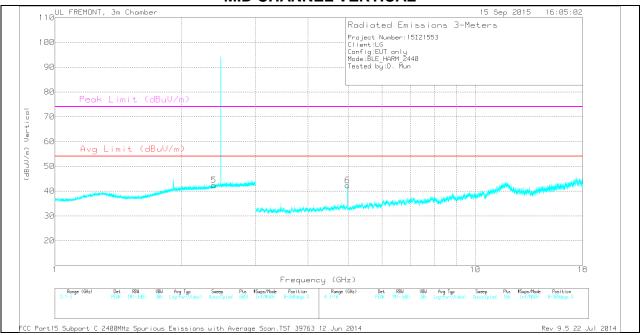
Frequenc y	Meter Reading	Det	AF T119 (dB/m)	Amp/Cbl/ Fltr/Pad	DC Corr (dB)	Corrected Reading	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit	PK Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
(GHz)	(dBuV)			(dB)		(dBuV/m)			(dBuV/m)				
1.716	42.74	PK2	29.2	-22.7	0	49.24	-	-	-	-	360	100	V
1.716	30.85	MAv1	29.2	-22.7	2.07	39.42	-	-	-	-	360	100	V
1.716	30.64	RMS	29.2	-22.7	2.07	39.21	-	-	-	-	360	100	V
4.804	46.33	PK2	34	-29.4	0	50.93	-	-	74	-23.07	360	200	V
4.804	39.16	MAv1	34	-29.4	2.07	45.83	54	-8.23	-	-	360	200	V
9.41	36.59	PK2	36.4	-24.1	0	48.89	-	-	74	-25.11	360	200	V
9.41	24.73	MAv1	36.4	-24.1	2.07	39.10	54	-14.96	-	-	360	200	V
11.986	35.92	PK2	39.1	-22.8	0	52.22	-	-	74	-21.78	360	100	V
11.989	24.64	MAv1	39.1	-22.9	2.07	42.91	54	-11.15	-	-	360	100	V
14.333	37.76	PK2	39.4	-25.4	0	51.76	-	-	-	-	360	100	V
14.333	26.28	MAv1	39.4	-25.4	2.07	42.35	-	-	-	-	360	100	V
16.442	35.88	PK2	40.8	-24.2	0	52.48	-	-	-	-	360	100	V
16.444	24.31	MAv1	40.8	-24.2	2.07	42.98	-	-	-	-	360	100	V

## MID CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## **MID CHANNEL VERTICAL**



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## **MID CHANNEL DATA**

## TRACE MARKERS

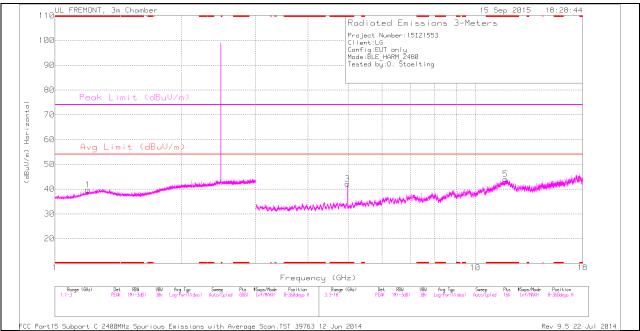
Marker	Frequency	Meter	Det	AF T119	Amp/Cbl/Fltr	DC Corr (dB)	Corrected	Avg Limit	Margin	Peak Limit	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading		(dB/m)	/Pad (dB)		Reading	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(Degs)	(cm)	
		(dBuV)					(dBuV/m)							
1	1.912	33.2	PK	31.2	-22.6	0	41.8	-	-	-	-	0-360	100	Н
2	2.256	33.3	PK	31.5	-22.3	0	42.5	-	-	74	-31.5	0-360	200	Н
5	2.385	32.83	PK	32	-22.4	0	42.43	-	-	74	-31.57	0-360	200	V
3	3.456	30.21	PK	32.8	-30.5	0	32.51	-	-	-	-	0-360	200	Н
4	4.457	30.98	PK	33.7	-30.3	0	34.38	-	-	-	-	0-360	200	Н
6	4.96	38.61	PK	34	-30.3	0	42.31	-	-	74	-31.69	0-360	200	V

PK - Peak detector

#### RADIATED EMISSIONS

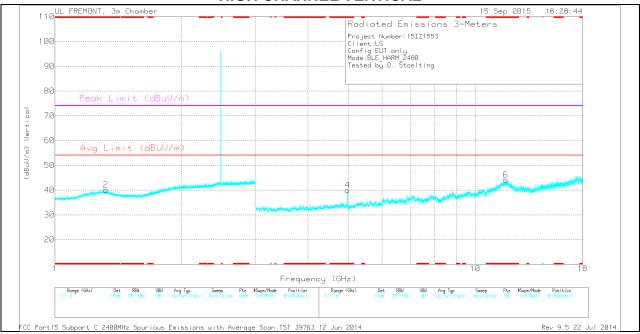
Frequenc	Meter	Det	AF T119	Amp/Cbl/	DC Corr	Corrected	Avg Limit	Margin	Peak	PK Margin	Azimuth	Height	Polarity
у	Reading		(dB/m)	Fltr/Pad	(dB)	Reading	(dBuV/m)	(dB)	Limit	(dB)	(Degs)	(cm)	
(GHz)	(dBuV)			(dB)		(dBuV/m)			(dBuV/m)				
1.91	30.59	MAv1	31.1	-22.5	2.07	41.20	-	-	-	-	0	100	Н
1.911	42.01	PK2	31.1	-22.5	0	50.61	-	-	-	-	0	100	Н
2.255	30.69	MAv1	31.5	-22.3	2.07	41.90	54	-12.10	-	-	0	200	Н
2.257	42.1	PK2	31.5	-22.3	0	51.3	-	-	74	-22.7	0	200	Н
2.386	42.99	PK2	32	-22.4	0	52.59	-	-	74	-21.41	0	200	V
2.386	30.74	MAv1	32	-22.4	2.07	42.35	54	-11.65	-	-	0	200	V
3.454	28.78	MAv1	32.8	-30.5	2.07	33.09	-	-	-	-	0	200	Н
3.457	39.89	PK2	32.8	-30.6	0	42.09	-	-	-	-	0	200	Н
4.458	40.23	PK2	33.7	-30.3	0	43.63	-	-	-	-	0	200	Н
4.458	28.98	MAv1	33.7	-30.3	2.07	34.39	-	-	-	-	0	200	Н
4.96	43.66	PK2	34	-30.3	0	47.36	-	-	74	-26.64	0	200	V
4.96	34.29	MAv1	34	-30.3	2.07	40.00	54	-14	-	-	0	200	V

## HIGH CHANNEL HORIZONTAL



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## **HIGH CHANNEL VERTICAL**



Note: Emission was scanned up to 26GHz; No emissions were detected above the noise floor which was at least 20dB below the specification limit.

## **HIGH CHANNEL DATA**

## TRACE MARKERS

Marker	Frequency	Meter	Det	AF T119	Amp/Cbl/Fltr	DC Corr (dB)	Corrected	Avg Limit	Margin	Peak Limit	PK Margin	Azimuth	Height	Polarity
	(GHz)	Reading		(dB/m)	/Pad (dB)		Reading	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(Degs)	(cm)	
		(dBuV)					(dBuV/m)							
1	* 1.197	33.87	PK	28.9	-23.1	0	39.67	-	-	74	-34.33	0-360	100	Н
2	* 1.32	33.56	PK	29.6	-23.1	0	40.06	-	-	74	-33.94	0-360	200	V
3	* 4.96	38.45	PK	34	-30.3	0	42.15	-	-	74	-31.85	0-360	100	Н
5	* 11.791	27.4	PK	39	-22.4	0	44	-	-	74	-30	0-360	100	Н
4	* 4.96	36.32	PK	34	-30.3	0	40.02	-	-	74	-33.98	0-360	200	V
6	* 11.81	27.62	PK	39	-22.5	0	44.12	-	-	74	-29.88	0-360	200	V

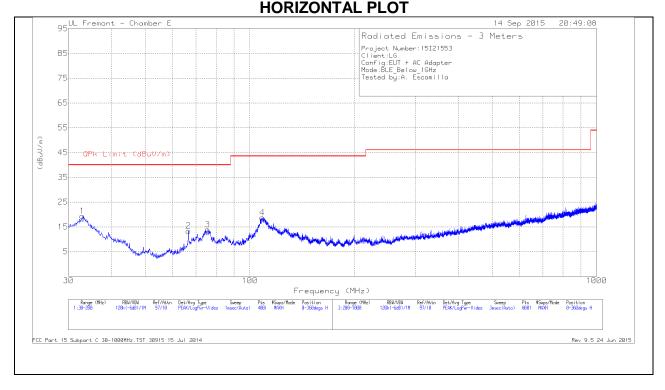
PK - Peak detector

#### RADIATED EMISSIONS

Frequenc	Meter	Det	AF T119	Amp/Cbl/ Fltr/Pad	DC Corr	Corrected	Avg Limit	Margin	Peak Limit	PK Margin	Azimuth	Height	Polarity
y (GHz)	Reading (dBuV)		(dB/m)	(dB)	(dB)	Reading (dBuV/m)	(dBuV/m)	(dB)	(dBuV/m)	(dB)	(Degs)	(cm)	
* 1.199	42.85	PK2	28.9	-23.2	0	48.55	-	-	74	-25.45	0	100	Н
* 1.196	31.05	MAv1	28.9	-23.1	2.07	38.92	54	-15.08	-	-	0	100	Н
* 1.321	42.76	PK2	29.6	-23.1	0	49.26	-	-	74	-24.74	0	200	V
* 1.32	30.89	MAv1	29.6	-23.1	2.07	39.46	54	-14.54	-	-	0	200	V
* 4.959	45.08	PK2	34	-30.3	0	48.78	-	-	74	-25.22	101	158	Н
* 4.96	36.77	MAv1	34	-30.3	2.07	42.54	54	-11.46	-	-	101	158	Н
* 11.791	37.69	PK2	39	-22.4	0	54.29	-	-	74	-19.71	189	329	Н
* 11.79	24.98	MAv1	39	-22.4	2.07	43.65	54	-10.35	-	-	189	329	Н
* 4.959	45.06	PK2	34	-30.3	0	48.76	-	-	74	-25.24	53	298	V
* 4.96	35.73	MAv1	34	-30.3	2.07	41.50	54	-12.50	-	-	53	298	V
* 11.808	36.96	PK2	39	-22.5	0	53.46	-	-	74	-20.54	25	111	V
* 11.808	25.05	MAv1	39	-22.5	2.07	43.62	54	-10.38	-	-	25	111	V

## 9.3. WORST-CASE BELOW 1 GHz

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



## **VERTICAL PLOT**



## **BELOW 1 GHz TABLE**

Marker	Frequency	Meter	Det	AF T408	Amp/Cbl	Corrected	QPk Limit	Margin	Azimuth	Height	Polarity
	(MHz)	Reading		(dB/m)	(dB)	Reading	(dBuV/m)	(dB)	(Degs)	(cm)	
		(dBuV)				(dBuV/m)					
4	* 108.5825	38.09	Pk	12	-31.3	18.79	43.52	-24.73	0-360	301	Н
7	* 74.9225	39.32	Pk	8.4	-31.4	16.32	40	-23.68	0-360	100	V
8	* 109.7725	39.47	Pk	12.3	-31.3	20.47	43.52	-23.05	0-360	100	V
1	32.89	31.68	Pk	19.5	-31.8	19.38	40	-20.62	0-360	301	Н
5	33.3575	43.18	Pk	19.1	-31.8	30.48	40	-9.52	0-360	100	V
2	66.5925	36.45	Pk	8.4	-31.5	13.35	40	-26.65	0-360	301	Н
6	66.635	44.06	Pk	8.4	-31.5	20.96	40	-19.04	0-360	100	V
3	75.6025	37.13	Pk	8.3	-31.5	13.93	40	-26.07	0-360	401	Н

PK - Peak detector