

HCT CO., LTD.

CERTIFICATE OF COMPLIANCE

FCC Certification

Applicant Name:

LG Electronics MobileComm U.S.A., Inc.

Address:

1000 Sylvan Avenue, Englewood Cliffs NJ 07632

Date of Issue: August 31, 2012 Test Site/Location: HCT CO., LTD., 105-1, Jangam-ri, Majang-Myeon, Icheon-si, Kyunggi-Do, Korea Report No.: HCTR1208FR41-1

HCT FRN: 0005866421

FCC ID: ZNFP895QBAPPLICANT: LG Electronics MobileComm U.S.A., Inc.FCC Model(s):. LG Electronics MobileComm U.S.A., Inc.Additional FCC Model(s):. GeP895qbAdditional FCC Model(s):. BeysqbCurrype:. Celular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFCMax. RF Output Power:. Add Bm (4.43 mW)Frequency Range:. 2402 MHz (2480 MHz(BT 4.0_Low Energy Mode)

Modulation type GFSK

FCC Classification: Digital Transmission System(DTS)

FCC Rule Part(s): Part 15.247

Engineering Statement:

The measurements shown in this report were made in accordance with the procedures indicated, and the emissions from this

equipment were found to be within the limits applicable. I assume full responsibility for the accuracy and completeness of these measurements, and for the qualifications of all persons taking them.

HCT CO., LTD. Certifies that no party to this application has subject to a denial of Federal benefits that includes FCC benefits pursuant to section 5301 of the Anti-Drug Abuse Act of 1998,21 U.S. C.853(a)

Report prepared by : Jong Seok Lee Test engineer of RF Team

Approved by : Sang Jun Lee Manager of RF Team

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Version

TEST REPORT NO.	DATE	DESCRIPTION	
HCTR1208FR41	August 27, 2012	- First Approval Report	
HCTR1208FR41-1 August 31, 2012		-Revised information of BT LE test program(Page. 13)	

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Address:	1000 Sylvan Avenue, Englewood Cliffs NJ 07632
FCC ID:	ZNFP895QB
EUT Type:	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with
	Bluetooth/WLAN/NFC
Model name(s):	LG-P895qb
Additional Model name(s):	P895qb, LGP895qb, P895QB, LGP895QB, LG-P895QB
Date(s) of Tests:	August 03, 2012 ~ August 10, 2012
Place of Tests:	HCT Co., Ltd. 105-1, Jangam-ri , Majang-Myeon, Icheon-si, Kyunggi-Do, 467-811, KOREA. (IC Recognition No. : 5944A-3)

2. EUT DESCRIPTION

EUT Type	Cellular/PCS C	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC			
FCC Model Name	LG-P895qb				
Additional FCC Model Name	P895qb, LGP8	P895qb, LGP895qb, P895QB, LGP895QB, LG-P895QB			
Power Supply	DC 3.7 V				
Battery type	Li-ion Battery(Standard)				
Frequency Range	nge TX: 2402 MHz ~ 2480 MHz				
	RX: 2402 MHz	~ 2480 MHz			
Max. RF Output Power	Peak	6.46 dBm (4.43 mW)			
	Average -3.06 dBm (0.49 mW)				
BT Operating Mode	BT 4.0_Low Energy Mode				
Modulation Type	GFSK				
Number of Channels	40 Channels				
Antenna Specification	Manufacturer: LS Mtron Ltd.				
	Antenna type: Internal Antenna				
	Peak Gain : ().88 dBi			

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3. TEST METHODOLOGY

The measurement procedure described in the American National Standard for Testing Unlicensed Wireless Devices(ANSI C63.10-2009) and FCC KDB 558074 D01 DTS Meas Guidance V01 dated January 18, 2012 entitled "Guidance for Performing Compliance Measurements on Digital Transmission Systems(DTS) Operating Under §15.247" were used in the measurement.

3.1 EUT CONFIGURATION

The EUT configuration for testing is installed on RF field strength measurement to meet the Commissions requirement and operating in a manner that intends to maximize its emission characteristics in a continuous normal application.

3.2 EUT EXERCISE

The EUT was operated in the engineering mode to fix the Tx frequency that was for the purpose of the measurements. According to its specifications, the EUT must comply with the requirements of the Section 15.207, 15.209 and 15.247 under the FCC Rules Part 15 Subpart C.

3.3 GENERAL TEST PROCEDURES

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 6.2 of ANSI C63.10. (Version :2009) Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3 m away from the receiving antenna, which varied from 1 m to 4 m to find out the highest emission. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical. In order to find out the max. emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes according to the requirements in Section 6.3 of ANSI C63.10. (Version: 2009).

3.4 DESCRIPTION OF TEST MODES

The EUT has been tested under operating condition. Test program used to control the EUT for staying in continuous transmitting and receiving mode is programmed. Channel low, mid and high with highest data rate (worst case) is chosen for full testing.

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4. INSTRUMENT CALIBRATION

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturer's recommendations for utilizing calibration equipments, which is traceable to recognized national standards.

5. FACILITIES AND ACCREDITATIONS

5.1 FACILITIES

The SAC(Semi-Anechoic Chamber) and conducted measurement facility used to collect the radiated data are located at the 105-1, Jangam-ri, Majang-Myeon, Icheon-si, Kyunggi-Do, 467-811, Korea. The site is constructed in conformance with the requirements of ANSI C63.4. (Version :2003) and CISPR Publication 22. Detailed description of test facility was submitted to the Commission and accepted dated March 02, 2011 (Registration Number: 90661)

5.2 EQUIPMENT

Radiated emissions are measured with one or more of the following types of Linearly polarized antennas: tuned dipole, bi-conical, log periodic, bi-log, and/or ridged waveguide, horn. Spectrum analyzers with pre-selectors and quasi-peak detectors are used to perform radiated measurements. Conducted emissions are measured with Line Impedance Stabilization Networks and EMI Test Receivers. Calibrated wideband preamplifiers, coaxial cables, and coaxial attenuators are also used for making measurements.

All receiving equipment conforms to CISPR Publication 16-1, "Radio Interference Measuring Apparatus and Measurement Methods."

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6. ANTENNA REQUIREMENTS

According to FCC 47 CFR §15.203:

"An intentional radiator antenna shall be designed to ensure that no antenna other than that furnished by the responsible party can be used with the device. The use of a permanently attached antenna or of an antenna that uses a unique coupling to the intentional radiator shall be considered sufficient to comply with the provisions of this section."

* The antennas of this E.U.T are permanently attached.

*The E.U.T Complies with the requirement of §15.203

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7. SUMMARY TEST OF RESULTS

Test Description	FCC Part Section(s)	Test Limit	Test Condition	Test Result
6 dB Bandwidth	§15.247(a)(2)	> 500 kHz		PASS
Conducted Maximum Peak Output Power	§15.247(b)(3)	< 1 Watt		PASS
Power Spectral Density	§15.247(e)	< 8 dBm / 3 kHz Band	CONDUCTED	PASS
Band Edge(Out of Band Emissions)	§15.247(d)	Conducted < 20 dBc		PASS
AC Power line Conducted Emissions	§15.207	cf. Section 8.6		PASS
Radiated Spurious Emissions	§15.205, 15.209	cf. Section 8.5.1		PASS
Radiated Restricted Band Edge	§15.247(d), 15.205, 15.209	cf. Section 8.5.2	RADIATED	PASS

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8. TEST RESULT

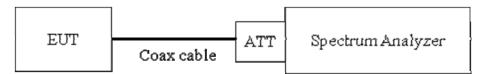
8.1 6dB BANDWIDTH MEASUREMENT

Test Requirements and limit, §15.247(a)(2)

The bandwidth at 6dB down from the highest in-band spectral density is measured with a spectrum analyzer connected to the receive antenna while the EUT is operating in transmission mode at the appropriate frequencies.

The minimum permissible 6dB bandwidth is 500 kHz.

TEST CONFIGURATION



TEST PROCEDURE

The transmitter output is connected to the Spectrum Analyzer.

The Spectrum Analyzer is set to RBW = 1 - 5 % of the EBW VBW = 3 * RBW SPAN = 5 MHzDetector = Peak Trace mode = max hold Sweep = auto couple

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LE Mode	;	Measured Bandwidth	Minimum Bandwidth	Pass / Fail	
Frequency [MHz]	Channel No.	[kHz]	[kHz]		
2402	0	667.7	500	Pass	
2440	19	665.7	500	Pass	
2480	39	666.8	500	Pass	

Conducted 6dB Bandwidth Measurements

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ilent Spectrum Analyzer - Occupied BW 04:44:26 PM Aug 10, 2012 Radio Std: None Sweep/Control Center Freq: 2.402000000 GHz Trig: Free Run Avg|Hold #Atten: 20 dB Avg|Hold: 1/1 Sweep Time 1.87 ms Man Radio Device: BTS #IFGain:Low Ref Offset 10.1 dB Ref 20.00 dBm Auto 10 dB/div Log Sweep Setup > \sim W Pause Center 2.402 GHz #Res BW 51 kHz Span 5 MHz Sweep 1.867 ms #VBW 160 kHz Total Power 11.3 dBm Occupied Bandwidth Gate [Off, LO] 1.0627 MHz Transmit Freq Error 12.116 kHz **OBW Power** 99.00 % Points x dB Bandwidth 667.7 kHz x dB -6.00 dB 1001 STATUS MSG

6dB Bandwidth plot (Low-CH 0)

6dB Bandwidth plot (Mid-CH 19)



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	RF 50 Ω AC e 1.87 ms	+ #IFGain:Low			0 GHz vg Hold	ALIGNAUTO	D5:49:307 Radio Sto Radio De		Sweep/ Swe	ep Tim
0 dB/div	Ref Offset 10.1 dB Ref 20.00 dBm								<u>Auto</u>	1.87 m Ma
.og 10.0									Sweep	Setup
10.0										
20.0 30.0		\sim			Lv	7				Paus
40.0	~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~	/				L'				
50.0 50.0 70.0	and har and the second of the					- And	m	month from		
Center 2.48 Res BW 57			#VB	W 160 kHz				oan 5 MHz 1.867 ms		
Occupie	ed Bandwidth 1.0	0615 M		Total Pow	'er	13.7	l dBm		ſ	Gate
Transmit	Freq Error	-1.648	kHz	OBW Pow	/er	99	9.00 %			Poin
x dB Bandwidth		666.8	kHz	x dB		-6.	00 dB			10
SG						STATUS				

6dB Bandwidth plot (High-CH 39)

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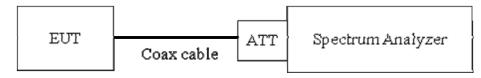
8.2 OUTPUT POWER MEASUREMENT

Test Requirements and limit, §15.247(b)(3)

A transmitter antenna terminal of EUT is connected to the input of a Spectrum Analyzer. Measurement is made while the EUT is operating in transmission mode at the appropriate frequencies.

The maximum permissible conducted output power is 1 Watt.

TEST CONFIGURATION



TEST PROCEDURE

The transmitter output is connected to the Spectrum Analyzer. We use the spectrum analyzer's integrated band power measurement function. We tested according to 718828 DTS Measurement Guidance DR01.

This EUT TX condition is actual operating mode by BT LE test program.

The Spectrum Analyzer is set to

Peak Power(Measurement Procedure PK2 in KDB 558074)
RBW = 1 MHz
VBW = 3 MHz
SPAN = 5 - 30 % greater than the EBW
Detector Mode = Peak
Integrated bandwidth = EBW
Sweep = auto couple
Trace Mode = max hold
Average Power(Measurement Procedure AVG2 in KDB 558074)

RBW = 1 MHz VBW = 3 MHz SPAN = 5 - 30 % greater than the EBW Detector Mode = power averaging(RMS) or sample Integrated bandwidth = EBW Sweep = auto couple Sweep Point = 1001

Trace average at least 100 traces in power averaging(RMS) mode

Sample Calculation

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Output Power = Reading Value + ATT loss + Cable loss(1 ea)

= 10 dBm + 10 dB + 0.8 dB = 20.8 dBm

Note :

- 1. Spectrum reading values are not plot data. The power results in plot is already including the actual values of loss for the attenuator and cable combination.
- 2. Spectrum offset = Attenuator loss + Cable loss
- 3. We apply to the offset in the 2.4 GHz range that was rounded off to the closest tenth dB. Actual value of loss for the attenuator and cable combination is 10.11 dB at 2402 MHz and is 10.13 dB at 2480 MHz. So, the offset is 10.1 dB. And the offset gap in the 2.4 GHz range do not affect the conducted output power final result.

TEST RESULTS-Peak

Conducted Output Power Measurements

LE M	ode	Measured	Limit
Frequency[MHz] Channel No.		Power(dBm)	(dBm)
2402	0	4.80	30
2440	19	5.48	30
2480	39	6.46	30

TEST RESULTS-Average

Conducted Output Power Measurements

LE M	ode	Measured	Limit
Frequency[MHz]	Channel No.	Power(dBm)	(dBm)
2402	0	-4.64	30
2440	19	-3.96	30
2480	39	-3.06	30

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Conducted Output Power (Low-CH 0)

u I	RF 50 Ω	AC		SENSE:INT Center Freq: 2.402 Trig: Free Run #Atten: 20 dB		ALIGN AUTO	Radio Std		Sweep/Cor	
0 dB/div	Ref Offset Ref 20.0 0	10.1 dB	Gain:Low	#Atten: 20 dB			Radio Dev	/ice: BTS	Sweep 1. <u>Auto</u>	.00 m Ma
. 0 g 10.0 2.00									Sweep So	etup
20.0 30.0 40.0									F	aus
50.0 50.0										
enter 2.4 Res BW				#VBW 3 M	Hz			I.382 MHz eep 1 ms		
Channel Power				er Specti					Gate	
	4.80 dE	3 m / 1	.063 MI	łz	-55.46	aBm	/Hz		P	Poin 100
G						STATUS				

Conducted Output Power (Mid-CH 19)



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0	RF 50 Ω AC		Center Freq: 2.48000 Trig: Free Run	ALIGN AU 00000 GHz Avg Hold: 1/1	Radio Sto		Sweep/Control
	# Ref Offset 10.1 dB	IFGain:Low	#Atten: 20 dB		Radio De	vice: BTS	Sweep Tim 1.00 m Auto Ma
0 dB/div	Ref 20.00 dBm						
.og							
							Sweep Setup
).00							
0.0							
20.0							Pau
80.0							
0.0							1
0.0							
0.0							
0.0							
0.0							
enter 2.48 Res BW 1			#VBW 3 MH	Iz		1.38 MHz eep 1 ms	
Channe	l Power		Powe	r Spectral De	nsity		Gate [Off, LO
	40 - 10			50 00 JD			Loui, Eo
6	.46 dBm <i>i</i>	1.062 M	HZ	-53.80 dBi	m /Hz		
							Poin
							10
G					ATUS		4

Conducted Output Power (High-CH 39)

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RESULT PLOTS-Average

ilent Spectrum Analyzer - Channel Power 04:51:05 PM Aug 10, 2012 Radio Std: None ALIGN AUTO Sweep/Control Center Freq: 2.402000000 GHz Trig: Free Run Avg|Hold #Atten: 20 dB Avg|Hold: 100/100 Sweep Time 1.00 ms Man Radio Device: BTS #IFGain:Low Ref Offset 10.1 dB Ref 20.00 dBm Auto 10 dB/div Log Sweep Setup► Pause Center 2.402 GHz #Res BW 1 MHz Span 1.382 MHz #VBW 3 MHz Sweep 1 ms Gate **Channel Power Power Spectral Density** [Off, LO] -4.64 dBm / 1.063 MHz -64.90 dBm /Hz Points 1001 STATUS MSG

Conducted Output Power (Low-CH 0)

Conducted Output Power (Mid-CH 19)



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R		HFGain:Low	SENSE:INT Center Freq: 2.4800 → Trig: Free Run #Atten: 20 dB	ALIGNA 000000 GHz Avg Hold: 100/10	Radio St 10	PM Aug 10, 2012 d: None vice: BTS	Sweep/Control Sweep Tim
0 dB/div	Ref Offset 10.1 dB Ref 20.00 dBm						1.00 m <u>Auto</u> Ma
. og 10.0			· · · · · · · · · · · · · · · · · · ·			marmine	Sweep Setup
0.0							Paus
0.0 6.0							
20.0	GHz				Spar	1.38 MHz	
Res BW 1 N	ЛНz		#VBW 3 MI	Hz	Św	eep 1ms	
Channel Power			r Spectral D			Gate [Off, LO]	
-3.	06 dBm <i>i</i>	1.062 M	Hz	-63.32 dE	Sm /Hz		Poin 100
G				S	TATUS		

Conducted Output Power (High-CH 39)

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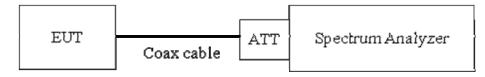
8.3 POWER SPECTRAL DENSITY

Test Requirements and limit, §15.247(e)

The peak power density is measured with a spectrum analyzer connected to the antenna terminal while the EUT is operating in transmission mode at the appropriate frequencies.

Minimum Standard – The transmitter power density average over 1-second interval shall not be greater than 8dBm in any 3kHz BW.

TEST CONFIGURATION



TEST PROCEDURE

We tested according to KDB 558074(issued 1/18/2012).

The spectrum analyzer is set to :

- 1. Span = 5 30 % greater than the EBW
- 2. RBW = 100 kHz
- 3. VBW = 300 kHz
- 4. Sweep = Auto couple
- 5. Detector Mode = Peak
- 6. Trace Mode = Max hold
- 7. Search peak

Sample Calculation

PSD = Reading Value + ATT loss + Cable loss(1 ea) + BWCF

Output Power = -5 dBm + 10 dB + 0.8 dB - 15.2 dB= 0.6 dBm

Where: BWCF(Bandwidth Correction Factor) = 10log(3 kHz/100 kHz) = -15.2 dB

Note :

- 1. Spectrum reading values are not plot data. The PSD results in plot is already including the actual values of loss for the attenuator and cable combination.
- 2. Spectrum offset = Attenuator loss + Cable loss
- 3. We apply to the offset in the 2.4 GHz range that was rounded off to the closest tenth dB. Actual value of loss for the attenuator and cable combination is 10.11 dB at 2402 MHz and is 10.13 dB at 2480 MHz. So, the offset is 10.1 dB. And the offset gap in the 2.4 GHz range do not affect the power spectral density final result.

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Frequency	Frequency Channel		Test Result					
(MHz)	No.	Mode	Spectrum	BWCF	PSD	Limit	Pass/	
(11112)			Value(dBm)	(dB)	(dBm)	(dBm)	Fail	
2402	0		4.475	-15.2	-10.725	8	Pass	
2440	19	LE	5.312	-15.2	-9.888	8	Pass	
2480	39		6.002	-15.2	-9.198	8	Pass	

Conducted Power Density Measurements

Note : PSD = Spectrum Value + BWCF

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT				
Test Report No.	Date of Issue:	EUT Type:	FCC ID:			
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB			
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Power Spectral Density (Low-CH 0)

Power Spectral Density (Mid-CH 19)



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RF 50 Ω AC		SENSE:INT	ALIGN AU Avg Type: Log-Pv	Vr TRACE 123456	Frequency
		Trig: Free Run #Atten: 20 dB	Avg Hold: 1/1		
Ref Offset 10.1 dB dB/div Ref 20.00 dBm			Mkr1 :	2.480 230 46 GHz 6.002 dBm	Auto Tu
.0					Center Fr 2.480000000 G
					Start Fr 2.479310000 G
.0					Stop Fr 2.480690000 G
.0					CF Sto 138.000 k Auto M
0					Freq Offs 0
enter 2.4800000 GHz tes BW 100 KHz	#VBW 3	00 kHz	Swee	Span 1.380 MHz p 1.00 ms (1001 pts)	
				TUS	

Power Spectral Density (High-CH 39)

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT				
Test Report No.	Date of Issue:	EUT Type:	FCC ID:			
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB			
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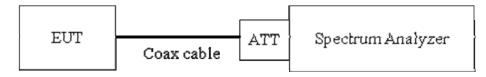


8.4 OUT OF BAND EMISSIONS AT THE BAND EDGE/ CONDUCTED SPURIOUS EMISSIONS Test Requirements and limit, §15.247(d)

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. In addition, radiated emissions which fall in the restricted bands, as defined in § 15.205(a), must also comply with the radiated emission limits specified in § 15.205(c)).

Limit : 20 dBc

I TEST CONFIGURATION



TEST PROCEDURE

The transmitter output is connected to the spectrum analyzer. RBW = 100 kHz(Upon 1 GHz = 1 MHz) VBW = 300 kHz(Upon 1 GHz = 1 MHz) Set span to encompass the spectrum to be examined Detector = Peak Trace Mode = max hold Sweep = auto couple

Measurements are made over the 30 MHz to 26 GHz range with the transmitter set to the lowest, middle, and highest channels.

Note :

- 1. The band edge results in plot is already including the actual values of loss for the attenuator and cable combination.
- 2. Spectrum offset = Attenuator loss + Cable loss
- 3. We apply to the offset in the 2.4 GHz range that was rounded off to the closest tenth dB. Actual value of loss for the attenuator and cable combination is 10.11 dB at 2402 MHz and is 10.13 dB at 2480 MHz. So, the offset is 10.1 dB. And the offset gap in the 2.4 GHz range do not affect the band edge final result.
- 5. In case of conducted spurious emissions test, please check factors blow table.

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Test Report No.	Date of Issue:	EUT Type:	FCC ID:					
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB					
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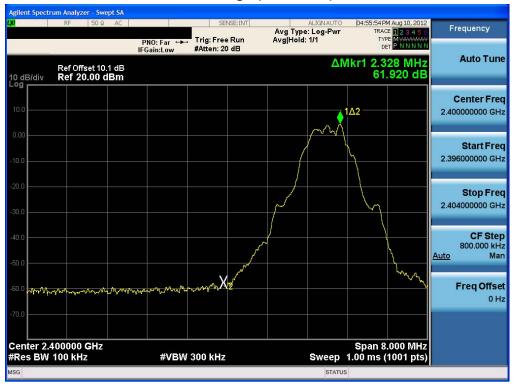
Freq(MHz)	Factor(dB)
30	10.37
100	10.16
200	10.15
300	10.14
400	10.18
500	10.19
600	10.20
700	10.30
800	10.25
900	10.28
1000	10.29
2000	10.17
2402*	10.11
2440*	10.10
2480*	10.13
3000	10.26
4000	10.31
5000	9.85
6000	10.20
7000	10.60
8000	10.53
9000	10.23
10000	10.41
11000	10.65
12000	11.19
13000	10.97
14000	11.42
15000	12.01
16000	11.77
17000	10.78
18000	10.76
19000	11.15
20000	10.75
21000	10.82
22000	10.82
23000	11.26
24000	11.08
25000	11.18
26000	10.90

Note : 1. '*' is fundamental frequency range.

2. Factor = Cable loss + Attenuator loss

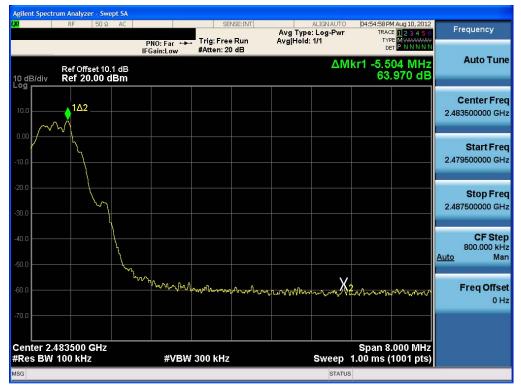
FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT					
Test Report No.	Date of Issue:	EUT Type:	FCC ID:				
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB				
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BandEdge (Low-CH 0)

BandEdge (High-CH 39)



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Test Report No.	Date of Issue:	EUT Type:	FCC ID:			
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB			
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	t Spectr	ım Analyzer -		-	22							
L)XI		RF 5	OΩ AC		SE	NSE:INT	Ava Type	ALIGNAUTO		M Aug 10, 2012	Frequency	
				PNO: Fast +>	Trig: Free #Atten: 20		Avg Hold:		TY			
10 dE Log	3/div	Ref Offset Ref 20.0		IFGam.LUW	FREE FREE			N	/kr1 67. -56.2	83 MHz 93 dBm	Auto Tun	ıe
10.0											Center Fre 515.000000 M⊦	
0.00 -10.0										-15.65 dBm	Start Fre 30.000000 M⊦	
-20.0 -30.0											Stop Fre 1.000000000 G⊦	
-40.0	1										CF Ste 97.000000 M⊦ <u>Auto</u> Ma	İz
-60.0	ndu	holistant	l nyhrlafarrah	white the state which	indadarik oʻrtishi	mmulationplace	halman	, tokowani www.ipojoj	hand	sadal marga	Freq Offs 0 F	
	t 30.0 s BW	MHz 100 kHz		#VBW	300 kHz			Sweep		0000 GHz 1001 pts)		
MSG								STATU	s			

Conducted Spurious Emission (Low-CH 0)

Conducted Spurious Emission (Mid-CH 19)

Frequency	M Aug 10, 2012	TRAC	ALIGNAUTO E: Log-Pwr	Avg Typ	ENSE:INT	SE		AC	RF 50 Ω	
Auto Tu		DE kr1 67.		Avg Hold		Trig: Free #Atten: 20	PNO: Fast ++ IFGain:Low		Ref Offset 10	
	11 dBm	-56.9							Ref 20.00	lB/div
Center Fro 515.000000 Mi										
Start Fre 30.000000 Mi	-14.33 dBm)
Stop Fr 1.000000000 Gi										ı — — —
CF Ste 97.000000 M <u>Auto</u> M										j
Freq Offs 01	hannalinannyn	y _{en} harstad/1	unteration	านุม.เม่นรับสำคัญสู่เริ่ม	un and an and an	happy	แปลามปฏิเภรา (ลูปสาคว	Mare manyelet	ynuununuulu	and a star
	0000 GHz 1001 pts)	Stop 1.0	Sween		,	300 kHz	#\/B\A			nt 30.0 es BW
	roor proj		STATUS			000 1112	<i></i>		00-M112	

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT	www.hct.co.kr
Test Report No.	Date of Issue:	EUT Type:	FCC ID:
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB
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	um Analyzer - Swept SA					
X	RF 50 Ω AC	PNO: Fast ↔→→ IFGain:Low	SENSE:INT Trig: Free Run #Atten: 20 dB	ALIGNAUTO Avg Type: Log-Pwr Avg Hold: 1/1	05:00:29 PM Aug 10, 2012 TRACE 1 2 3 4 5 6 TYPE MWWWWW DET P N N N N N	Frequency
0 dB/div	Ref Offset 10.1 dB Ref 20.00 dBm	I Guilleow		IV	1kr1 67.83 MHz -56.349 dBm	Auto Tun
10.0						Center Fre 515.000000 MH
10.0					-13.53 dBm	Start Fre 30.000000 M⊦
20.0 30.0 						Stop Fre 1.000000000 GF
10.0						CF Ste 97.000000 MH <u>Auto</u> Ma
50.0 	hlyn yn felar i mewnen wraitw		annobaldilar hillaring trafficien	ลสมูโละ _{เหน} ่อมูโต้ไปการที่สะาญชังไปได้ส ^{ุก} ราช	มูลของรังประสารที่สุดสารที่สุดสารที่สารมีการที่ได้สาร	Freq Offso 0 ⊦
Start 30.0 Res BW		#VBW	300 kHz	Sweep	Stop 1.0000 GHz 92.7 ms (1001 pts)	
SG				STATUS		

Conducted Spurious Emission (High-CH 39)

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT				
Test Report No.	Date of Issue:	EUT Type:	FCC ID:			
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB			
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Conducted Spurious Emission (Low-CH 0)

Conducted Spurious Emission (Mid-CH 19)



FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT					
Test Report No.	Date of Issue:	EUT Type:	FCC ID:				
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB				
		Page 2 8 of 44					



	RF	50 Ω AC		SEN	ISE:INT		ALIGNAUTO		4 Aug 10, 2012	Frequency
			PNO: Fast	Trig: Free #Atten: 20		Avg Type Avg Hold:	: Log-Pwr 1/1	TYP	E 1 2 3 4 5 6 E M WWWWW T P N N N N N	
dB/div		et 10.1 dB 00 dBm					ΔMk	r1 -23.0 44.	00 GHz 174 dB	Auto Tur
	1Δ2									Center Fre 13.500000000 GH
.00).0									-13.53 dBm	Start Fr 1.000000000 G
).0).0										Stop Fr 26.000000000 G
0.0	Hurry of all work	w line the way of	N. M. John Starting	www.com	ANNEW AND	Warter Walnut and W	www	hand and a second	mmrk	CF Ste 2.500000000 GI <u>Auto</u> M
).0										Freq Offs 0
tart 1.00 Res BW	GHz 1.0 MHz		#VBW	3.0 MHz			Sweep		6.00 GHz 1001 pts)	
G							STATUS			

Conducted Spurious Emission (High-CH 39)

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT					
Test Report No.	Date of Issue:	EUT Type:	FCC ID:				
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB				
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8.5 RADIATED MEASUREMENT. 8.5.1 RADIATED SPURIOUS EMISSIONS.

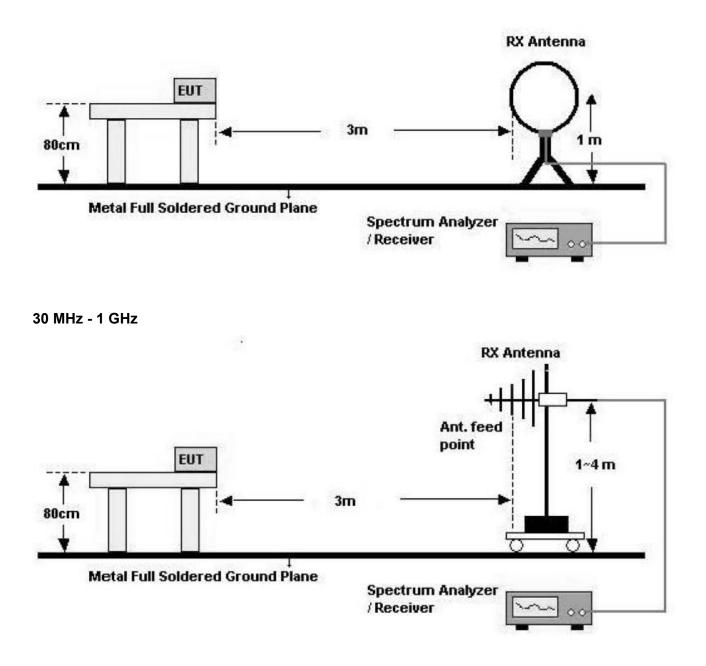
Test Requirements and limit, §15.205, §15.209

Frequency (MHz)	Field Strength (uV/m)	Measurement Distance (m)
0.009 - 0.490	2400/F(kHz)	300
0.490 – 1.705	24000/F(kHz)	30
1.705 – 30	30	30
30-88	100	3
88-216	150	3
216-960	200	3
Above 960	500	3

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT			
Test Report No.	Date of Issue:	EUT Type:	FCC ID:		
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB		
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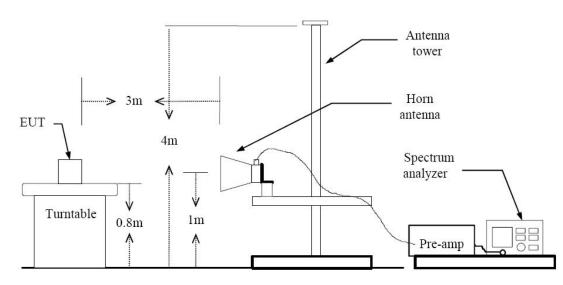


Below 30 MHz



FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT			
Test Report No.	Date of Issue:	EUT Type:	FCC ID:		
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB		
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TEST PROCEDURE

- 1. The EUT is placed on a turntable, which is 0.8 m above ground plane.
- 2. The turntable shall be rotated for 360 degrees to determine the position of maximum emission level.
- 3. EUT is set 3 m away from the receiving antenna, which is varied from 1m to 4m to find out the highest emissions.
- 4. Maximum procedure was performed on the six highest emissions to ensure EUT compliance.
- 5. And also, each emission was to be maximized by changing the polarization of receiving antenna both horizontal and vertical.
- 6. Repeat above procedures until the measurements for all frequencies are complete.

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT					
Test Report No.	Date of Issue:	EUT Type:	FCC ID:				
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB				
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9 kHz – 30MHz

Operation Mode: Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin		
MHz	dBμN	dB /m	dB	(H/V)	dBµN/m	dBµN/m	dB		
No Critical peaks found									

- 1. Measuring frequencies from 9 kHz to the 30MHz.
- 2. The reading of emissions are attenuated more than 20 dB below the permissible limits or the field strength is too small to be measured.
- 3. Distance extrapolation factor = 40 log (specific distance / test distance) (dB)
- 4. Limit line = specific Limits (dBuV) + Distance extrapolation factor
- 5. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT			
Test Report No.	Date of Issue:	EUT Type:	FCC ID:		
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB		
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Below 1 GHz

Operation Mode: Normal Mode

Frequency	Reading	Ant. factor	Cable loss	Ant. POL	Total	Limit	Margin	
MHz	dBμN	dB /m	dB	(H/V)	dBµN/m	dBµN/m	dB	
No Critical peaks found								

- 1. Measuring frequencies from 30 MHz to the 1 GHz.
- 2. Radiated emissions measured in frequency range from 30 MHz to 1000 MHz were made with an instrument using Quasi peak detector mode.
- 3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT					
Test Report No.	Date of Issue:	EUT Type:	FCC ID:				
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Frequency	Reading	AN.+CL-AMP G	ANT. POL	Total	Limit	Margin	
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Detect
4804	50.95	-0.84	V	50.11	74	23.89	PK
4804	37.19	-0.84	V	36.35	54	17.65	AV
7206	49.59	9.15	V	58.74	74	15.26	PK
7206	36.01	9.15	V	45.16	54	8.84	AV
4804	50.08	-0.84	Н	49.24	74	24.76	PK
4804	37.27	-0.84	Н	36.43	54	17.57	AV
7206	49.82	9.15	Н	58.97	74	15.03	PK
7206	36.01	9.15	Н	45.16	54	8.84	AV

Operation Mode: CH Low(LE Mode)

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain
- 5. Spectrum setting:
 - a. Peak Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 1 MHz.
 - b. AV Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

FCC PT.15.247 TEST REPORT		www.hct.co.kr				
Test Report No.	Date of Issue:	EUT Type:	FCC ID:			
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB			



Frequency	Reading	AN.+CL-AMP G	ANT. POL	Total	Limit	Margin	
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Detect
4880	49.80	-0.37	V	49.43	74	24.57	PK
4880	36.96	-0.37	V	36.59	54	17.41	AV
7320	49.12	8.71	V	57.83	74	16.17	PK
7320	35.30	8.71	V	44.01	54	9.99	AV
4880	50.73	-0.37	Н	50.36	74	23.64	PK
4880	36.94	-0.37	Н	36.57	54	17.43	AV
7320	49.01	8.71	Н	57.72	74	16.28	PK
7320	35.37	8.71	н	44.08	54	9.92	AV

Operation Mode: CH Mid(LE Mode)

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- 3. Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain

5. Spectrum setting:

- a. Peak Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 1 MHz.
- b. AV Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT				
Test Report No.	Date of Issue:	EUT Type:	FCC ID:			
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB			
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		5 ()					
Frequency	Reading	AN.+CL-AMP G	ANT. POL	Total	Limit	Margin	
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	Detect
4960	49.37	0.50	V	49.87	74	24.13	PK
4960	35.52	0.50	V	36.02	54	17.98	AV
7440	49.36	8.95	V	58.31	74	15.69	PK
7440	35.98	8.95	V	44.93	54	9.07	AV
4960	49.13	0.50	Н	49.63	74	24.37	PK
4960	35.57	0.50	Н	36.07	54	17.93	AV
7440	50.44	8.95	Н	59.39	74	14.61	PK
7440	35.97	8.95	Н	44.92	54	9.08	AV

Operation Mode: CH High(LE Mode)

Notes:

- 1. Measuring frequencies from 1 GHz to the 10th harmonic of highest fundamental frequency.
- Measurements above show only up to 6 maximum emissions noted, or would be lesser if no specific emissions from the EUT are recorded (ie: margin > 20 dB from the applicable limit) and considered that's already beyond the background noise floor.
- Radiated emissions measured in frequency above 1000MHz were made with an instrument using Peak detector mode and average detector mode of the emission shown in Actual FS column.
- 4. Total = Reading Value + Antenna Factor + Cable Loss Amp Gain

5. Spectrum setting:

- a. Peak Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 1 MHz.
- b. AV Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
- 6. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

FCC PT.15.247 TEST REPORT		www.hct.co.kr					
Test Report No.	Date of Issue:	EUT Type:	FCC ID:				
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB				
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8.5.2 RADIATED RESTRICTED BAND EDGES

Test Requirements and limit, §15.247(d) §15.205, §15.209

In any 100 kHz bandwidth outside the frequency band in which the spread spectrum 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. Attenuation below the general limits specified in Section 15.209(a) is not required. In addition, radiated emissions which fall in the restricted bands, as defined in Section 15.205(a), must also comply with the radiated emission limits specified in section 15.209(a) (See section 15.205(c)).

Operation Mode
Operating Frequency
Channel No

2402 MHz, 2480 MHz	BT 4.0_LE	
	2402 MHz, 2480 MHz	
0 Ch, 39 Ch	0 Ch, 39 Ch	

Frequency	Reading	A.F.+CL	Ant. Pol.	Total	Limit	Margin	Detect
[MHz]	dBuV	[dB]	[H/V]	[dBuV/m]	[dBuV/m]	[dB]	
2390.0	24.11	33.90	Н	58.01	74	15.99	PK
2390.0	11.15	33.90	Н	45.05	54	8.95	AV
2390.0	24.66	33.90	V	58.56	74	15.44	PK
2390.0	11.13	33.90	V	45.03	54	8.97	AV
2483.5	32.54	33.99	Н	66.53	74	7.47	PK
2483.5	14.00	33.99	Н	47.99	54	6.01	AV
2483.5	30.46	33.99	V	64.45	74	9.55	PK
2483.5	13.58	33.99	V	47.57	54	6.43	AV

- 1. Total = Reading Value + Antenna Factor + Cable Loss
- 2. Spectrum setting:
 - a. Peak Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 1 MHz.
 - b. AV Setting 1 GHz 26 GHz, RBW = 1 MHz, VBW = 10 Hz.
- 3. We have done x, y, z planes in EUT and horizontal and vertical polarization in detecting antenna.

FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT	www.hct.co.kr			
Test Report No.	Date of Issue:	EUT Type:	FCC ID:			
HCTR1208FR41-1	August 31, 2012	Cellular/PCS GSM/GPRS/EDGE/WCDMA/HSDPA/HSUPA Phone with Bluetooth/WLAN/NFC	ZNFP895QB			



8.6 POWERLINE CONDUCTED EMISSIONS

Test Requirements and limit, §15.207

For an intentional radiator which is designed to be connected to the public utility (AC) power line, the radio frequency voltage that is conducted back onto the AC power line on any frequency or frequencies within the band 150 kHz to 30 MHz shall not exceed 250 microvolts (The limit decreases linearly with the logarithm of the frequency in the range 0.15 MHz to 0.50 MHz). The limits at specific frequency range is listed as follows:

	Limits (dBµV)				
Frequency Range (MHz)	Quasi-peak	Average			
0.15 to 0.50	66 to 56	56 to 46			
0.50 to 5	56	46			
5 to 30	60	50			

Compliance with this provision shall be based on the measurement of the radio frequency voltage between each power line (LINE and NEUTRAL) and ground at the power terminals.

Test Configuration

See test photographs attached in Appendix 1 for the actual connections between EUT and support equipment.

TEST PROCEDURE

- 1. The EUT is placed on a wooden table 80 cm above the reference ground plane.
- 2. The EUT is connected via LISN to a test power supply.
- 3. The measurement results are obtained as described below:
- 4. Detectors Quasi Peak and Average Detector.
- 5. We are performed the AC Power Line Conducted Emission test for Ch.39 on BT 4.0 LE mode. Because Ch.39 on BT 4.0 LE mode is worst case.

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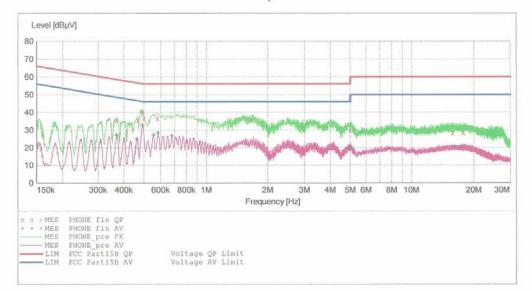


HCT

LG-P895qb
LG
BT 4.0 MODE
SHIELD ROOM
JS LEE
FCC PART 15 B
Н

SCAN TABLE: "FCC PART 15 B(H)"

Short Desc	ription:		FCC PART 15	CLASS B		
Start	Stop	Step	Detector	Meas.	IF	Transducer
Frequency	Frequency	Width		Time	Bandw.	
150.0 kHz	500.0 kHz	1.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None
500.0 kHz	5.0 MHz	4.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None
5.0 MHz	30.0 MHz	4.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None



MEASUREMENT RESULT: "PHONE fin QP"

8/9/2012	11:10AM					
Frequen	cy Leve Hz dBµ		Limit dBµV	Margin dB	Line	PE
0.3680	10 35.7	0 9.8	59	22.8		
0.4670	10 35.7	0 9.8	57	20.9		
0.4920	10 39.7	0 9.8	56	16.5		
0.5000	00 36.8	0 9.8	56	19.2		
0.5800	00 36.6	0 9.8	56	19.4		
1.6760	00 35.8	0 9.9	56	20.2		
5.0000	00 30.0	0 10.2	56	26.0		
15.7680	00 28.5	0 11.1	60	31.5		
17.7520	00 28.7	0 11.4	60	31.3		

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MEASUREMENT RESULT: "PHONE_fin AV"

					OAM	8/9/2012 11:1
PE	Line	Margin dB	Limit dBµV	Transd dB	Level dBµV	Frequency MHz
		21.4	49	9.8	27.20	0.368010
		21.6	47	9.8	25.00	0.461010
		13.2	46	9.8	33.00	0.492010
		18.8	46	9.8	27.20	0.556000
		17.6	46	9.8	28.40	0.584000
		19.2	46	9.8	26.80	0.680000
2000		26.1	46	10.2	19.90	5.000000
		29.8	50	11.1	20.20	16.100000
		29.6	50	11.3	20.40	17.416000

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FCC PT.15.247 TEST REPORT		FCC CERTIFICATION REPORT	www.hct.co.kr
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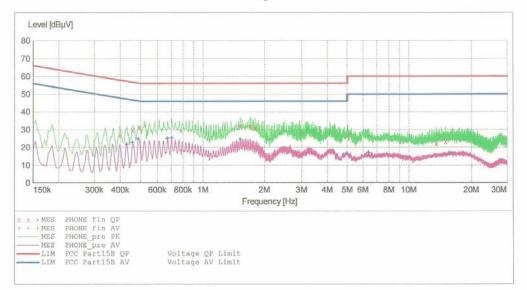
HCT

EMC

EUT:	LG-P895qb
Manufacturer:	LG
Operating Condition:	BT 4.0 MODE
Test Site:	SHIELD ROOM
Operator:	JS LEE
Test Specification:	FCC PART 15 CLASS B
Comment:	N

SCAN TABLE: "FCC PART 15 B(N)"

Start	Stop	Step	Detector	Meas.	IF	Transducer
	Frequency			Time	Bandw.	
150.0 kHz	500.0 kHz	4.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None
500.0 kHz	5.0 MHz	4.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None
5.0 MHz	30.0 MHz	4.0 kHz	MaxPeak Average	10.0 ms	9 kHz	None



MEASUREMENT RESULT: "PHONE fin QP"

8/9/2012	11:0	6AM						
Freque	ncy MHz	Level dBµV	Transd dB	Limit dBµV	Margin dB	Line	PE	
0.398	010	27.10	10.0	58	30.8			
0.458	010	29.80	10.0	57	26.9			
0.490	010	31.40	10.0	56	24.8			
1.528	000	31.90	10.1	56	24.1			
1.712	000	32.20	10.1	56	23.8			
1.804	000	30.90	10.1	56	25.1			
5.024	000	26.60	10.4	60	33.4			
13.524	000	22.30	11.1	60	37.7			
14.972	000	23.40	11.2	60	36.6			

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FCC PT.15.247 TEST REPORT		www.hct.co.kr	
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MEASUREMENT RESULT: "PHONE_fin AV"

					6AM	8/9/2012 11:0
PE	Line	Margin	Limit	Transd	Level	Frequency
		dB	dBµV	dB	dBµV	MHz
		25.3	47	10.0	22.00	0.430010
		23.9	47	10.0	22.80	0.458010
		21.4	46	10.0	24.80	0.486010
		20.8	46	10.0	25.20	0.672000
		20.6	46	10.0	25.40	0.704000
		21.4	46	10.1	24.60	1.528000
		29.4	46	10.4	16.60	5.000000
		32.8	50	10.5	17.20	6.372000
		33.2	50	11.4	16.80	15.792000

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Manufacturer	Model / Equipment	Calibration	Calibration	Serial No.
		Interval	Due	
Rohde & Schwarz	ENV216/ LISN	Annual	02/09/2013	100073
Schwarzbeck	VULB 9168/ TRILOG Antenna	Biennial	02/09/2013	200
Rohde & Schwarz	ESI 40 / EMI TEST RECEIVER	Annual	05/03/2013	831564103
Agilent	E4440A/ Spectrum Analyzer	Annual	05/02/2013	US45303008
Agilent	N9020A/ SIGNAL ANALYZER	Annual	07/31/2013	MY51110020
HD	MA240/ Antenna Position Tower	N/A	N/A	556
EMCO	1050/ Turn Table	N/A	N/A	114
HD GmbH	HD 100/ Controller	N/A	N/A	13
HD GmbH	KMS 560/ SlideBar	N/A	N/A	12
Rohde & Schwarz	SCU-18/ Signal Conditioning Unit	Annual	09/19/2012	10094
MITEQ	AMF-6B-180265-35-10P / POWER AMP	Annual	04/16/2013	667624
CERNEX	CBL26405040 / POWER AMP	Annual	04/16/2013	19660
Schwarzbeck	BBHA 9120D/ Horn Antenna	Biennial	10/17/2013	937
Schwarzbeck	BBHA9170 / Horn Antenna(15 GHz ~ 40 GHz)	Biennial	10/26/2012	BBHA9170342
Rohde & Schwarz	FSP / Spectrum Analyzer	Annual	02/09/2013	839117/011
Agilent	E4416A /Power Meter	Annual	11/07/2012	GB41291412
Agilent	E9327A /POWER SENSOR	Annual	05/02/2013	MY4442009
Wainwright Instrument	WHF3.3/18G-10EF / High Pass Filter	Annual	05/02/2013	1
Wainwright Instrument	WRCJ2400/2483.5-2370/2520-60/14SS / Band Reject Filter	Annual	05/02/2013	1
Hewlett Packard	11636B/Power Divider	Annual	11/07/2012	11377
Hewlett Packard	11667B / Power Splitter	Annual	06/05/2013	05001
DIGITAL	EP-3010 /DC POWER SUPPLY	Annual	11/07/2012	3110117
ITECH	IT6720 / DC POWER SUPPLY	Annual	11/07/2012	010002156287001199
TESCOM	TC-3000C / BLUETOOTH TESTER	Annual	11/14/2012	3000C000276
Rohde & Schwarz	CBT / BLUETOOTH TESTER	Annual	05/02/2013	100422
EMCO	6502.LOOP ANTENNA	Biennial	01/11/2014	9009-2536
MITEQ	AMF-6D-001180-35-20P/ POWER AMP	Annual	09/26/2012	990893
CERNEX	CBLU1183540 / POWER AMP	Annual	07/27/2013	21691

FCC PT.15.247 TEST REPORT		www.hct.co.kr					
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