PCTEST ENGINEERING LABORATORY, INC.
7185 Oakland Mills Road, Columbia, MD 21046 USA
Tel. 410.290.6652 / Fax 410.290.6654
http://www.pctestlab.com

MEASUREMENT REPORT
FCC Part 22, 24, & 27 LTE

Applicant Name:
LG Electronics MobileComm U.S.A
1000 Sylvan Avenue
Englewood Cliffs, NJ 07632
United States

Date of Testing:
7/24-8/15/2017
Test Site/Location:
PCTEST Lab., Columbia, MD, USA
Test Report Serial No.:
1M1707180223-03-R2.ZNF

FCC ID :	**ZNFLS998**
APPLICANT:	**LG ELECTRONICS MOBILECOMM U.S.A**

Application Type:	Class II Permissive Change
Models:	LGLS998
Additional Model(s):	LG-LS998, LS998, LG-AS998, LGA998, AS998
FCC Classification:	PCS Licensed Transmitter Held to Ear (PCE)
FCC Rule Part(s):	§2; §22; §24; §27
Test Procedure(s):	ANSI/TIA-603-D-2010, KDB 971168 D01 v02r02, KDB 648474 D03 v01r04
EUT Type:	Portable Handset
Test Device Serial No.:	*identical prototype* [S/N: 01573, 01571, 01572, 01570]
Class II Permissive Change:	Please see FCC change document

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in §2.947. Test results reported herein relate only to the item(s) tested.

This revised Test Report (S/N: 1M1707180223-03-R2.ZNF) supersedes and replaces the previously issued test report (S/N: 1M1707180223-03-R1.ZNF) on the same subject device for the same type of testing as indicated. Please discard or destroy the previously issued test report(s) and dispose of it accordingly.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Randy Ortanez
President

ACCREDITED
TESTING CERT#2041.01

V 6.8
07/14/2017

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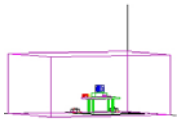
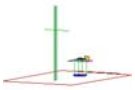


MEASUREMENT REPORT
FCC Part 22, 24, & 27



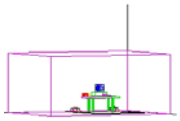
§2.1033 General Information

APPLICANT:	LG Electronics MobileComm U.S.A
APPLICANT ADDRESS:	1000 Sylvan Avenue Englewood Cliffs, NJ 07632, United States
TEST SITE:	PCTEST ENGINEERING LABORATORY, INC.
TEST SITE ADDRESS:	7185 Oakland Mills Road, Columbia, MD 21045 USA
FCC RULE PART(S):	§2; §22; §24; §27
BASE MODEL:	LGLS998
FCC ID:	ZNFLS998
FCC CLASSIFICATION:	PCS Licensed Transmitter Held to Ear (PCE)
FREQUENCY TOLERANCE:	±0.00025 % (2.5 ppm)
Test Device Serial No.:	01573, 01571, 01572, 01570 ☐ Production ☒ Pre-Production ☐ Engineering
DATE(S) OF TEST:	7/24-8/15/2017
TEST REPORT S/N:	1M1707180223-03-R2.ZNF

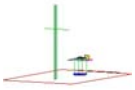
Test Facility / Accreditations

Measurements were performed at PCTEST Engineering Lab located in Columbia, MD 21046, U.S.A.

- PCTEST facility is an FCC registered (PCTEST Reg. No. 159966) test facility with the site description report on file and has met all the requirements specified in Section 2.948 of the FCC Rules and Industry Canada (2451B-1).
- PCTEST Lab is accredited to ISO 17025 by U.S. National Institute of Standards and Technology (NIST) under the National Voluntary Laboratory Accreditation Program (NVLAP Lab code: 100431-0) in EMC, FCC and Telecommunications.
- PCTEST Lab is accredited to ISO 17025-2005 by the American Association for Laboratory Accreditation (A2LA) in Specific Absorption Rate (SAR) testing, Hearing Aid Compatibility (HAC) testing, CTIA Test Plans, and wireless testing for FCC and Industry Canada Rules.
- PCTEST Lab is a recognized U.S. Conformity Assessment Body (CAB) in EMC and R&TTE (n.b. 0982) under the U.S.-EU Mutual Recognition Agreement (MRA).
- PCTEST TCB is a Telecommunication Certification Body (TCB) accredited to ISO/IEC Guide 65 by the American National Standards Institute (ANSI) in all scopes of FCC Rules and Industry Canada Standards (RSS).
- PCTEST facility is an IC registered (2451B-1) test laboratory with the site description on file at Industry Canada.
- PCTEST is a CTIA Authorized Test Laboratory (CATL) for AMPS, CDMA, and EvDO wireless devices and for Over-the-Air (OTA) Antenna Performance testing for AMPS, CDMA, GSM, GPRS, EGPRS, UMTS (W-CDMA), CDMA 1xEVDO, and CDMA 1xRTT.



MEASUREMENT REPORT
FCC Part 22, 24, & 27



Mode	FCC Rule Part	Tx Frequency (MHz)	ERP/EIRP		Modulation
			Max. Power (W)	Max. Power (dBm)	
LTE Band 12	27	699.7 - 715.3	0.043	16.34	QPSK
LTE Band 12	27	699.7 - 715.3	0.037	15.67	16QAM
LTE Band 12	27	699.7 - 715.3	0.028	14.44	64QAM
LTE Band 12	27	700.5 - 714.5	0.042	16.24	QPSK
LTE Band 12	27	700.5 - 714.5	0.037	15.74	16QAM
LTE Band 12	27	700.5 - 714.5	0.030	14.80	64QAM
LTE Band 12/17	27	701.5 - 713.5	0.041	16.08	QPSK
LTE Band 12/17	27	701.5 - 713.5	0.034	15.34	16QAM
LTE Band 12/17	27	701.5 - 713.5	0.026	14.18	64QAM
LTE Band 12/17	27	704 - 711	0.043	16.35	QPSK
LTE Band 12/17	27	704 - 711	0.034	15.30	16QAM
LTE Band 12/17	27	704 - 711	0.027	14.25	64QAM
LTE Band 13	27	779.5 - 784.5	0.054	17.30	QPSK
LTE Band 13	27	779.5 - 784.5	0.046	16.64	16QAM
LTE Band 13	27	779.5 - 784.5	0.035	15.38	64QAM
LTE Band 13	27	782	0.049	16.88	QPSK
LTE Band 13	27	782	0.040	16.03	16QAM
LTE Band 13	27	782	0.032	15.05	64QAM
LTE Band 5/26	22H	824.7 - 848.3	0.061	17.88	QPSK
LTE Band 5/26	22H	824.7 - 848.3	0.052	17.19	16QAM
LTE Band 5/26	22H	824.7 - 848.3	0.043	16.36	64QAM
LTE Band 5/26	22H	825.5 - 847.5	0.068	18.32	QPSK
LTE Band 5/26	22H	825.5 - 847.5	0.054	17.30	16QAM
LTE Band 5/26	22H	825.5 - 847.5	0.043	16.29	64QAM
LTE Band 5/26	22H	826.5 - 846.5	0.062	17.93	QPSK
LTE Band 5/26	22H	826.5 - 846.5	0.051	17.09	16QAM
LTE Band 5/26	22H	826.5 - 846.5	0.042	16.23	64QAM
LTE Band 5/26	22H	829 - 844	0.062	17.89	QPSK
LTE Band 5/26	22H	829 - 844	0.053	17.21	16QAM
LTE Band 5/26	22H	829 - 844	0.037	15.69	64QAM
LTE Band 26	22H	831.5 - 841.5	0.063	18.02	QPSK
LTE Band 26	22H	831.5 - 841.5	0.049	16.91	16QAM
LTE Band 26	22H	831.5 - 841.5	0.040	15.97	64QAM
LTE Band 4	27	1710.7 - 1754.3	0.331	25.20	QPSK
LTE Band 4	27	1710.7 - 1754.3	0.273	24.37	16QAM
LTE Band 4	27	1710.7 - 1754.3	0.210	23.23	64QAM

Mode	FCC Rule Part	Tx Frequency (MHz)	EIRP		Modulation
			Max. Power (W)	Max. Power (dBm)	
LTE Band 4	27	1711.5 - 1753.5	0.358	25.54	QPSK
LTE Band 4	27	1711.5 - 1753.5	0.301	24.78	16QAM
LTE Band 4	27	1711.5 - 1753.5	0.231	23.64	64QAM
LTE Band 4	27	1712.5 - 1752.5	0.339	25.31	QPSK
LTE Band 4	27	1712.5 - 1752.5	0.283	24.52	16QAM
LTE Band 4	27	1712.5 - 1752.5	0.221	23.44	64QAM
LTE Band 4	27	1715 - 1750	0.336	25.26	QPSK
LTE Band 4	27	1715 - 1750	0.284	24.53	16QAM
LTE Band 4	27	1715 - 1750	0.213	23.29	64QAM
LTE Band 4	27	1717.5 - 1747.5	0.361	25.58	QPSK
LTE Band 4	27	1717.5 - 1747.5	0.313	24.95	16QAM
LTE Band 4	27	1717.5 - 1747.5	0.250	23.98	64QAM
LTE Band 4	27	1720 - 1745	0.357	25.52	QPSK
LTE Band 4	27	1720 - 1745	0.286	24.56	16QAM
LTE Band 4	27	1720 - 1745	0.241	23.81	64QAM
LTE Band 2/25	24E	1850.7 - 1914.3	0.229	23.59	QPSK
LTE Band 2/25	24E	1850.7 - 1914.3	0.185	22.67	16QAM
LTE Band 2/25	24E	1850.7 - 1914.3	0.151	21.78	64QAM
LTE Band 2/25	24E	1851.5 - 1913.5	0.341	25.33	QPSK
LTE Band 2/25	24E	1851.5 - 1913.5	0.278	24.44	16QAM
LTE Band 2/25	24E	1851.5 - 1913.5	0.206	23.14	64QAM
LTE Band 2/25	24E	1852.5 - 1912.5	0.343	25.35	QPSK
LTE Band 2/25	24E	1852.5 - 1912.5	0.279	24.45	16QAM
LTE Band 2/25	24E	1852.5 - 1912.5	0.225	23.53	64QAM
LTE Band 2/25	24E	1855 - 1910	0.351	25.45	QPSK
LTE Band 2/25	24E	1855 - 1910	0.234	23.69	16QAM
LTE Band 2/25	24E	1855 - 1910	0.192	22.84	64QAM
LTE Band 2/25	24E	1857.5 - 1907.5	0.309	24.90	QPSK
LTE Band 2/25	24E	1857.5 - 1907.5	0.244	23.88	16QAM
LTE Band 2/25	24E	1857.5 - 1907.5	0.202	23.05	64QAM
LTE Band 2/25	24E	1860 - 1905	0.319	25.04	QPSK
LTE Band 2/25	24E	1860 - 1905	0.239	23.78	16QAM
LTE Band 2/25	24E	1860 - 1905	0.192	22.84	64QAM
LTE Band 41	27	2498.5 - 2687.5	0.456	26.59	QPSK
LTE Band 41	27	2498.5 - 2687.5	0.285	24.55	16QAM
LTE Band 41	27	2498.5 - 2687.5	0.203	23.07	64QAM
LTE Band 41	27	2501 - 2685	0.506	27.04	QPSK
LTE Band 41	27	2501 - 2685	0.391	25.92	16QAM
LTE Band 41	27	2501 - 2685	0.297	24.73	64QAM
LTE Band 41	27	2503.5 - 2682.5	0.411	26.13	QPSK
LTE Band 41	27	2503.5 - 2682.5	0.283	24.52	16QAM
LTE Band 41	27	2503.5 - 2682.5	0.219	23.41	64QAM
LTE Band 41	27	2506 - 2680	0.507	27.05	QPSK
LTE Band 41	27	2506 - 2680	0.396	25.97	16QAM
LTE Band 41	27	2506 - 2680	0.332	25.21	64QAM

EUT Overview

1.0 INTRODUCTION

1.1 Scope

Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and/or unintentional radiators for compliance with the technical rules and regulations of the Federal Communications Commission and the Industry Canada Certification and Engineering Bureau.

1.2 Testing Facility

The map below shows the location of the PCTEST LABORATORY, its proximity to the FCC Laboratory, the Columbia vicinity, the Baltimore-Washington Internt'l (BWI) airport, the city of Baltimore and the Washington, DC area. (*See Figure 1-1*).

These measurement tests were conducted at the PCTEST Engineering Laboratory, Inc. facility located at 7185 Oakland Mills Road, Columbia, MD 21046. The site coordinates are 39º 10'23" N latitude and 76º 49'50" W longitude. The facility is 0.4 miles North of the FCC laboratory, and the ambient signal and ambient signal strength are approximately equal to those of the FCC laboratory. The detailed description of the measurement facility was found to be in compliance with the requirements of § 2.948 according to ANSI C63.4-2014 on January 22, 2015.

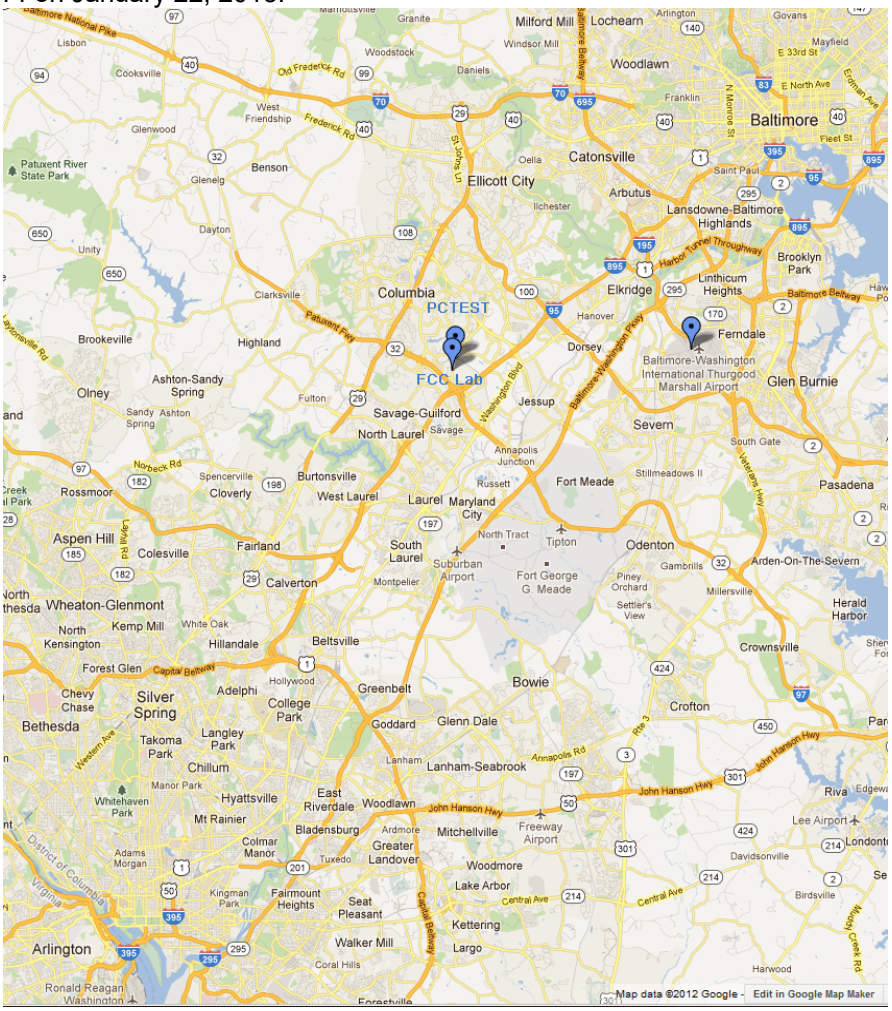


Figure 1-1. Map of the Greater Baltimore and Metropolitan Washington, D.C. area

2.0 PRODUCT INFORMATION

2.1 Equipment Description

The Equipment Under Test (EUT) is the **LG Portable Handset FCC ID: ZNFLS998**. The test data contained in this report pertains only to the emissions due to the EUT's LTE function.

2.2 Device Capabilities

This device contains the following capabilities:

850/1900 CDMA/EvDO Rev0/A, 1x Advanced (BC0, BC1, BC10), 850/1900 GPRS/EDGE, 850/1700/1900 WCDMA/HSPA, Multi-band LTE, 802.11b/g/n WLAN, 802.11a/n/ac UNII, Bluetooth (1x, EDR, LE), NFC

2.3 Test Configuration

The EUT was tested per the guidance of ANSI/TIA-603-D-2010 and KDB 971168 D01 v02r02. See Section 7.0 of this test report for a description of the radiated and antenna port conducted emissions tests.

This device supports wireless charging capability and, thus, is subject to the test requirements of KDB 648474 D03 v01r04. Additional radiated spurious emission measurements were performed with the EUT lying flat on a certified wireless charging pad (WCP) while operating under normal conditions in a simulated call or data transmission configuration. The worst case radiated emissions data is shown in this report.

2.4 EMI Suppression Device(s)/Modifications

No EMI suppression device(s) were added and no modifications were made during testing.

3.0 DESCRIPTION OF TESTS

3.1 Measurement Procedure

The measurement procedures described in the document titled "Land Mobile FM or PM – Communications Equipment – Measurements and Performance Standards" (ANSI/TIA-603-D-2010) and "Procedures for Compliance Measurement of the Fundamental Emission Power of Licensed Wideband (> 1 MHz) Digital Transmission Systems" (KDB 971168 D01 v02r02) were used in the measurement of the EUT.

3.1 Block C Frequency Range

§27.5(b)(3)

Two paired channels of 11 megahertz each are available for assignment in Block C in the 746-757 MHz and 776-787 MHz bands. In the event that no licenses for two channels in this Block C are assigned based on the results of the first auction in which such licenses were offered because the auction results do not satisfy the applicable reserve price, the spectrum in the 746-757 MHz and 776-787 MHz bands will instead be made available for assignment at a subsequent auction as follows: (i) Two paired channels of 6 megahertz each available for assignment in Block C1 in the 746-752 MHz and 776-782 MHz bands. (ii) Two paired channels of 5 megahertz each available for assignment in Block C2 in the 752-757 MHz and 782-787 MHz bands.

3.2 Block A Frequency Range

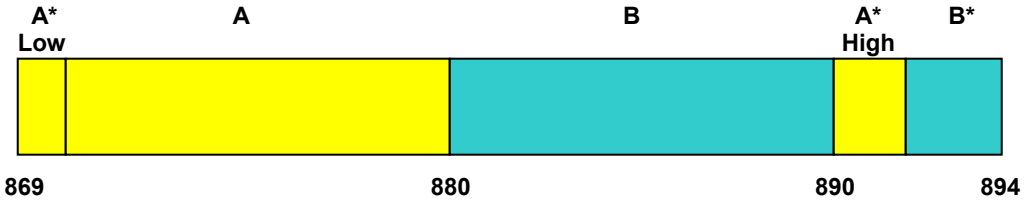
§27.5(c)

698-746 MHz band. The following frequencies are available for licensing pursuant to this part in the 698-746 MHz band: (1) Three paired channel blocks of 12 megahertz each are available for assignment as follows:

Block A: 698-704 MHz and 728-734 MHz;
Block B: 704-710 MHz and 734-740 MHz; and
Block C: 710-716 MHz and 740-746 MHz.

3.3 Cellular - Base Frequency Blocks

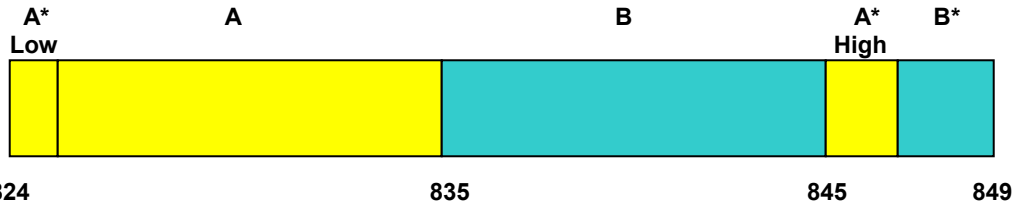
§22.905



BLOCK 1: 869 – 880 MHz (A* Low + A)
BLOCK 2: 880 – 890 MHz (B)
BLOCK 3: 890 – 891.5 MHz (A* High)
BLOCK 4: 891.5 – 894 MHz (B*)

3.4 Cellular - Mobile Frequency Blocks

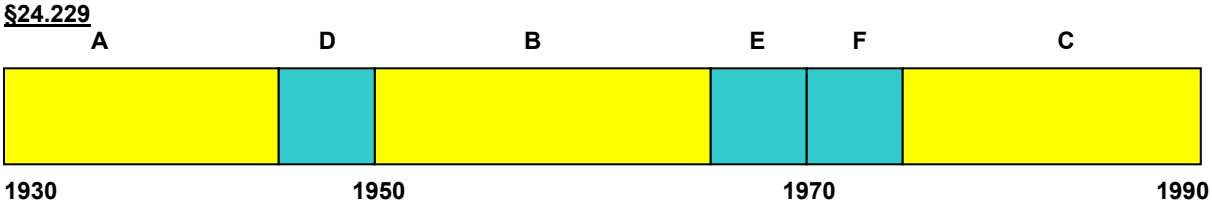
§22.905



BLOCK 1: 824 – 835 MHz (A* Low + A)
BLOCK 2: 835 – 845 MHz (B)
BLOCK 3: 845 – 846.5 MHz (A* High)
BLOCK 4: 846.5 – 849 MHz (B*)

3.5 PCS - Base Frequency Blocks

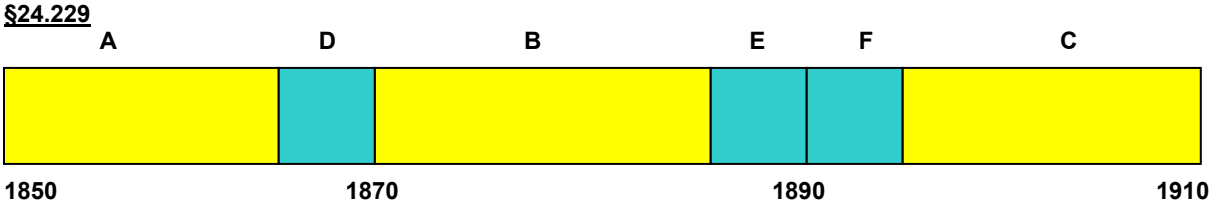
§24.229



BLOCK 1: 1930 – 1945 MHz (A)
BLOCK 2: 1945 – 1950 MHz (D)
BLOCK 3: 1950 – 1965 MHz (B)
BLOCK 4: 1965 – 1970 MHz (E)
BLOCK 5: 1970 – 1975 MHz (F)
BLOCK 6: 1975 – 1990 MHz (C)

3.6 PCS - Mobile Frequency Blocks

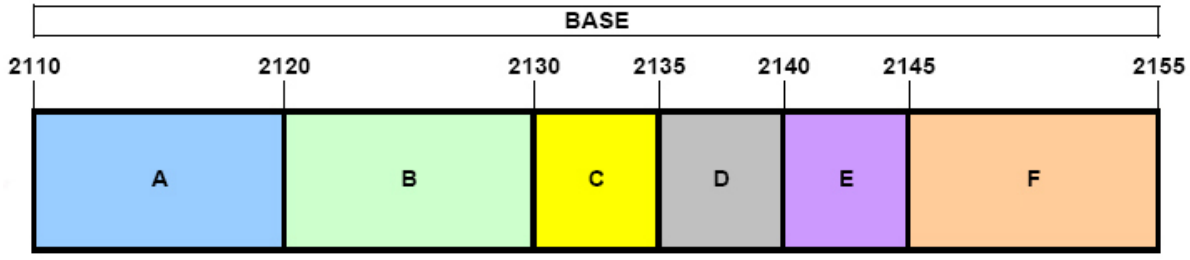
§24.229



BLOCK 1: 1850 – 1865 MHz (A)
BLOCK 2: 1865 – 1870 MHz (D)
BLOCK 3: 1870 – 1885 MHz (B)
BLOCK 4: 1885 – 1890 MHz (E)
BLOCK 5: 1890 – 1895 MHz (F)
BLOCK 6: 1895 – 1910 MHz (C)

3.7 AWS - Base Frequency Blocks

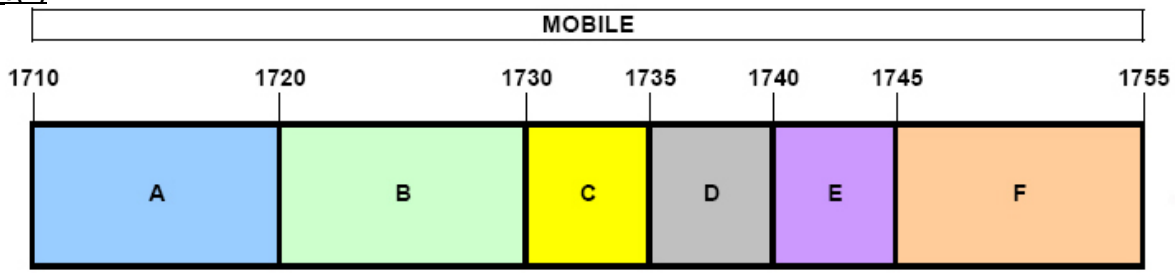
§27.5(h)



BLOCK 1: 2110 – 2120 MHz (A)
BLOCK 2: 2120 – 2130 MHz (B)
BLOCK 3: 2130 – 2135 MHz (C)
BLOCK 4: 2135 – 2140 MHz (D)
BLOCK 5: 2140 – 2145 MHz (E)
BLOCK 6: 2145 – 2155 MHz (F)

3.8 AWS - Mobile Frequency Blocks

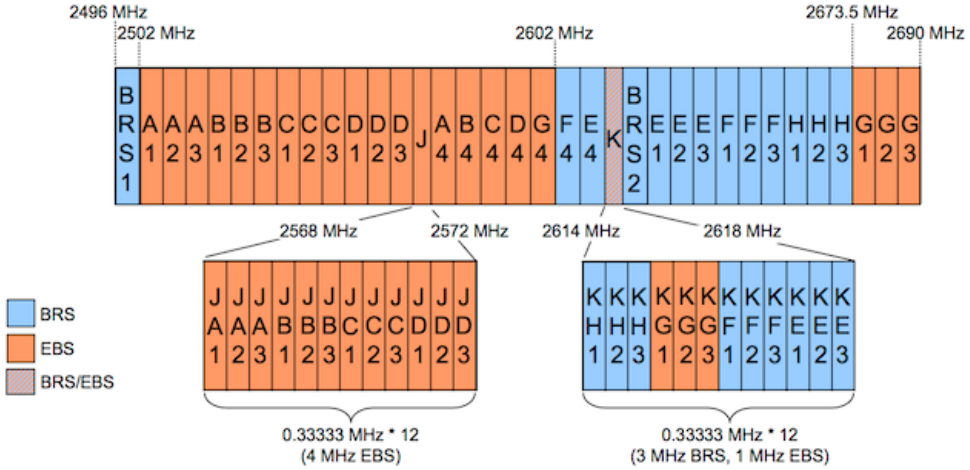
§27.5(h)



BLOCK 1: 1710 – 1720 MHz (A)
BLOCK 2: 1720 – 1730 MHz (B)
BLOCK 3: 1730 – 1735 MHz (C)
BLOCK 4: 1735 – 1740 MHz (D)
BLOCK 5: 1740 – 1745 MHz (E)
BLOCK 6: 1745 – 1755 MHz (F)

3.9 BRS/EBS Frequency Block

§27.5



3.10 Radiated Power and Radiated Spurious Emissions

§2.1053 §22.913(a.2) §22.917(a) §24.232(c) §24.238(a) §27.50(b.10) §27.50(c.10) §27.50(d.4) §27.53(f) §27.53(g) §27.53(h) §27.53(m)

The radiated test facilities consisted of an indoor 3 meter semi-anechoic chamber used for final measurements and exploratory measurements, when necessary. The measurement area is contained within the semi-anechoic chamber which is shielded from any ambient interference. The test site inside the chamber is a 6m x 5.2m elliptical, obstruction-free area in accordance with Figure 5.7 of Clause 5 in ANSI C63.4-2014. Absorbers are arranged on the floor between the turn table and the antenna mast in such a way so as to maximize the reduction of reflections for measurements above 1GHz. For measurements below 1GHz, the absorbers are removed. A raised turntable is used for radiated measurement. The turn table is a continuously rotatable, remote-controlled, metallic turntable and 2 meters (6.56 ft.) in diameter. The turn table is flush with the raised floor of the chamber in order to maintain its function as a ground plane. A 72.4cm high PVC support structure is placed on top of the turntable. A 3" (~7.6cm) sheet of high density polystyrene is used as the table top and is placed on top of the PVC supports to bring the total height of the table to 80cm.

The equipment under test was transmitting while connected to its integral antenna and is placed on a turntable 3 meters from the receive antenna. The receive antenna height is adjusted between 1 and 4 meter height, the turntable is rotated through 360 degrees, and the EUT is manipulated through all orthogonal planes representative of its typical use to achieve the highest reading on the receive spectrum analyzer. Radiated power levels are also investigated with the receive antenna horizontally and vertically polarized. The maximized power level is recorded using the spectrum analyzer "Channel Power" function with the integration band set to the emissions' occupied bandwidth, a RMS detector, RBW = 100kHz, VBW = 300kHz, and a 1 second sweep time over a minimum of 10 sweeps, per the guidelines of KDB 971168 D01 v02r02.

Per the guidance of ANSI/TIA-603-D-2010, a half-wave dipole is then substituted in place of the EUT. For emissions above 1GHz, a horn antenna is substituted in place of the EUT. The substitute antenna is driven by a signal generator with the level of the signal generator being adjusted to obtain the same receive spectrum analyzer level previously recorded from the spurious emission from the EUT. The power of the emission is calculated using the following formula:

$$P_{d\ [dBm]} = P_{g\ [dBm]} - \text{cable loss}_{\ [dB]} + \text{antenna gain}_{\ [dBd/dBi]}$$

Where, P_d is the dipole equivalent power, P_g is the generator output into the substitution antenna, and the antenna gain is the gain of the substitute antenna used relative to either a half-wave dipole (dBd) or an isotropic source (dBi). The substitute level is equal to $P_{g\ [dBm]}$ – cable loss $_{[dB]}$.

The calculated P_d levels are then compared to the absolute spurious emission limit of -13dBm which is equivalent to the required minimum attenuation of 43 + $10\log_{10}$(Power $_{[Watts]}$). For Band 41, the calculated P_d levels are compared to the absolute spurious emission limit of -25dBm which is equivalent to the required minimum attenuation of 55 + $10\log_{10}$(Power $_{[Watts]}$).

4.0 MEASUREMENT UNCERTAINTY

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4-2014. All measurement uncertainty values are shown with a coverage factor of k = 2 to indicate a 95% level of confidence. The measurement uncertainty shown below meets or exceeds the U_{CISPR} measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Contribution	Expanded Uncertainty (±dB)
Radiated Disturbance (<1GHz)	4.98
Radiated Disturbance (>1GHz)	5.07
Radiated Disturbance (>18GHz)	5.09

5.0 TEST EQUIPMENT CALIBRATION DATA

Test Equipment Calibration is traceable to the National Institute of Standards and Technology (NIST). Measurements antennas used during testing were calibrated in accordance to the requirements of ANSI C63.5-2006.

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
-	RE1	Radiated Emissions Cable Set (UHF/EHF)	6/21/2017	Annual	6/21/2018	RE1
Anritsu	MT8820C	Radio Communication Analyzer	9/15/2016	Annual	9/15/2017	6200901190
COM-Power	AL-130R	Active Loop Antenna	6/5/2017	Annual	6/5/2018	121085
Com-Power	PAM-103	Pre-Amplifier (1-1000MHz)	6/21/2017	Annual	6/21/2018	441119
Emco	3115	Horn Antenna (1-18GHz)	3/10/2016	Biennial	3/10/2018	9704-5182
EMCO	3160-09	Small Horn (18 - 26.5GHz)	8/23/2016	Biennial	8/23/2018	135427
ETS Lindgren	3117	1-18 GHz DRG Horn (Medium)	12/1/2016	Biennial	12/1/2018	125518
ETS Lindgren	3164-08	Quad Ridge Horn Antenna	4/26/2016	Biennial	4/26/2018	128337
ETS Lindgren	3164-08	Quad Ridge Horn Antenna	12/5/2016	Biennial	12/5/2018	128338
Mini Circuits	PWR-SEN-4GHS	USB Power Sensor	3/24/2017	Annual	3/24/2018	11401010036
Mini Circuits	TVA-11-422	RF Power Amp	N/A			QA1317001
Mini-Circuits	PWR-SEN-4RMS	USB Power Sensor	3/24/2017	Annual	3/24/2018	11210140001
Mini-Circuits	SSG-4000HP	Synthesized Signal Generator	N/A			11208010032
PCTEST	-	EMC Switch System	6/21/2017	Annual	6/21/2018	NM1
PCTEST	-	EMC Switch System	6/21/2017	Annual	6/21/2018	NM2
Rohde & Schwarz	CMW500	Radio Communication Tester	10/20/2016	Annual	10/20/2017	100976
Rohde & Schwarz	ESU26	EMI Test Receiver (26.5GHz)	4/19/2017	Annual	4/19/2018	100342
Rohde & Schwarz	ESU40	EMI Test Receiver (40GHz)	7/31/2017	Annual	7/31/2018	100348
Rohde & Schwarz	TS-PR26	18-26.5 GHz Pre-Amplifier	5/11/2017	Annual	5/11/2018	100040
Schwarzbeck	UHA 9105	Dipole Antenna (400 - 1GHz) Rx	3/30/2016	Biennial	3/30/2018	9105-2404
Schwarzbeck	UHA 9105	Dipole Antenna (400 - 1GHz) Tx	3/30/2016	Biennial	3/30/2018	9105-2403
Seekonk	NC-100	Torque Wrench 5/16", 8" lbs	3/2/2016	Biennial	3/2/2018	N/A
Sunol	JB5	Bi-Log Antenna (30M - 5GHz)	3/14/2016	Biennial	3/14/2018	A051107

Table 5-1. Test Equipment

Notes:

1. For equipment listed above that has a calibration date or calibration due date that falls within the test date range, care was taken to ensure that this equipment was used after the calibration date and before the calibration due date.

2. Equipment with a calibration date of “N/A” shown in this list was not used to make direct calibrated measurements.

6.0 SAMPLE CALCULATIONS

Spurious Radiated Emission – LTE Band

Example: Middle Channel LTE Mode 2nd Harmonic (1564 MHz)

The average spectrum analyzer reading at 3 meters with the EUT on the turntable was –81.0 dBm. The gain of the substituted antenna is 8.1 dBi. The signal generator connected to the substituted antenna terminals is adjusted to produce a reading of –81.0 dBm on the spectrum analzyer. The loss of the cable between the signal generator and the terminals of the substituted antenna is 2.0 dB at 1564 MHz. So 6.1 dB is added to the signal generator reading of –30.9 dBm yielding –24.80 dBm. The fundamental EIRP was 25.501 dBm so this harmonic was 25.501 dBm – (-24.80).

7.0 TEST RESULTS

7.1 Summary

Company Name: LG Electronics MobileComm U.S.A
FCC ID: ZNFLS998
FCC Classification: PCS Licensed Transmitter Held to Ear (PCE)
Mode(s): LTE

FCC Part Section(s)	Test Description	Test Limit	Test Condition	Result	Reference
22.913(a.2)	Effective Radiated Power (Band 26)	< 7 Watts max. ERP	RADIATED	PASS	Section 7.2
27.50(b.10) 27.50(c.10)	Effective Radiated Power (Band 12 13)	< 3 Watts max. ERP		PASS	Section 7.2
24.232(c) 27.50(h.2)	Equivalent Isotropic Radiated Power (Band 25 41)	< 2 Watts max. EIRP		PASS	Section 7.2
27.50(d.4)	Equivalent Isotropic Radiated Power (Band 4 66)	< 1 Watts max. EIRP		PASS	Section 7.2
2.1053 22.917(a) 24.238(a) 27.53(c) 27.53(g) 27.53(h)	Undesirable Emissions	> 43 + 10log$_{10}$ (P[Watts]) for all out-of-band emissions		PASS	Section 7.3
27.53(f)	Undesirable Emissions (Band 13)	< -70 dBW/MHz (for wideband signals) < -80 dBW (for discrete emissions less than 700Hz BW) For all emissions in the band 1559 – 1610 MHz		PASS	Section 7.3
27.53(m)	Undesirable Emissions	> 43 + 10log$_{10}$ (P[Watts]) at channel edges > 55 + 10log$_{10}$ (P[Watts]) at 5.5MHz away and beyond channel edges		PASS	Section 7.3

Table 7-1. Summary of Test Results

Note:

All modes of operation and data rates were investigated. The test results shown in the following sections represent the worst case emissions.

7.2 Radiated Power (ERP/EIRP)

§22.913(a.2) §24.232(c.2) §27.50(h.2) §27.50(b.10) §27.50(c.10) §27.50(d.4)

Test Overview

Effective Radiated Power (ERP) and Equivalent Isotropic Radiated Power (EIRP) measurements are performed using the substitution method described in ANSI/TIA-603-D-2010 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically and horizontally polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas. All measurements are performed as RMS average measurements while the EUT is operating at its maximum duty cycle, at maximum power, and at the appropriate frequencies.

Test Procedures Used

KDB 971168 D01 v02r02 – Section 5.2.1

ANSI/TIA-603-D-2010 – Section 2.2.17

Test Settings

1. Radiated power measurements are performed using the signal analyzer's "channel power" measurement capability for signals with continuous operation. For signals with burst transmission, the signal analyzer's "time domain power" measurement capability is used
2. RBW = 1 – 5% of the expected OBW, not to exceed 1MHz
3. VBW ≥ 3 x RBW
4. Span = 1.5 times the OBW
5. No. of sweep points ≥ 2 x span / RBW
6. Detector = RMS
7. Trigger is set to "free run" for signals with continuous operation with the sweep times set to "auto". Trigger is set to enable triggering only on full power bursts with the sweep time set less than or equal to the transmission burst duration
8. The integration bandwidth was roughly set equal to the measured OBW of the signal for signals with continuous operation. For signals with burst transmission, the "gating" function was enabled to ensure that measurements are performed during times in which the transmitter is operating at its maximum power
9. Trace mode = trace averaging (RMS) over 100 sweeps
10. The trace was allowed to stabilize

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

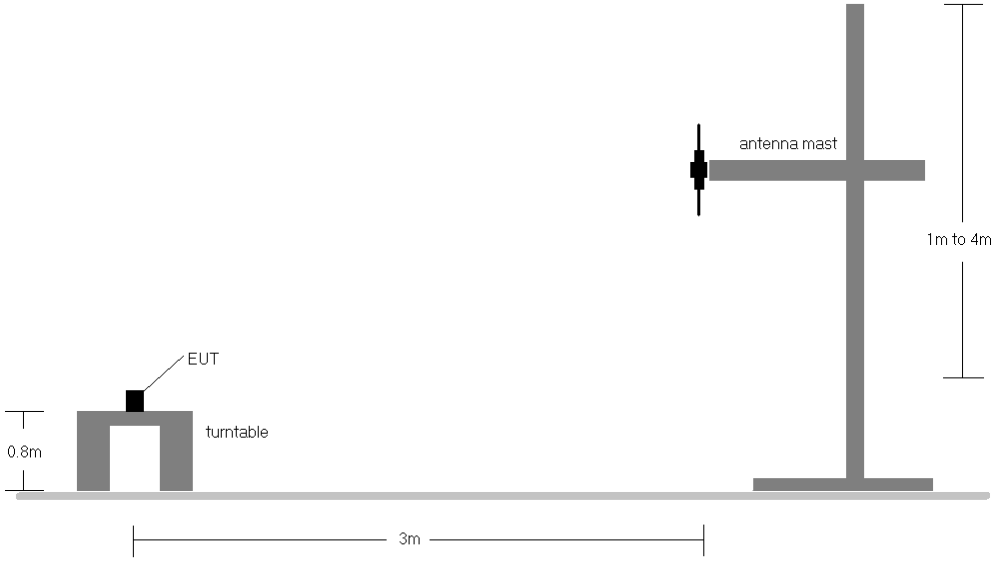


Figure 7-1. Radiated Test Setup <1GHz

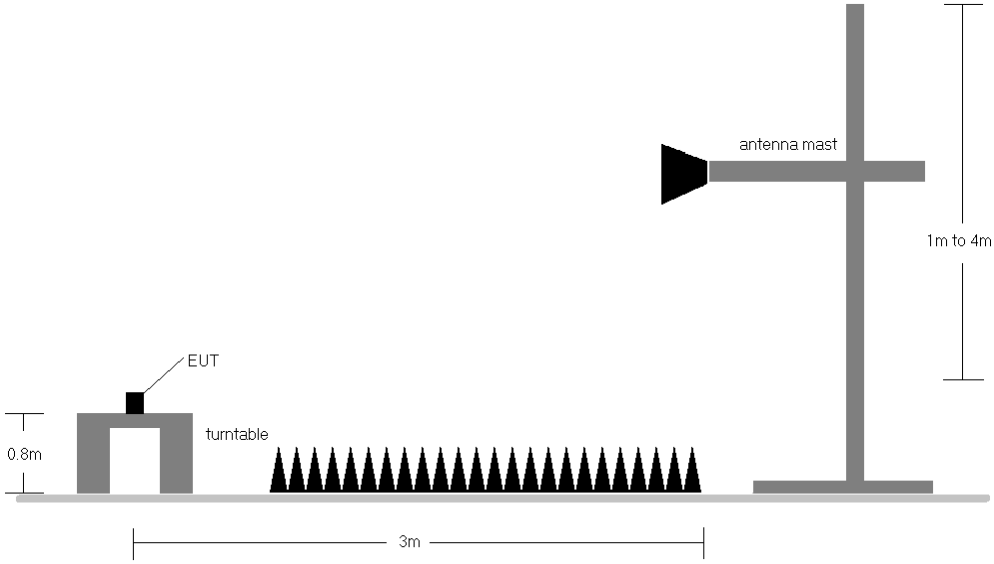


Figure 7-2. Radiated Test Setup >1GHz

Test Notes

1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.

2) This unit was tested with its standard battery.

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBd]	ERP [dBm]	ERP Limit [dBm]	Margin [dB]
699.70	1.4	QPSK	V	150	89	1 / 5	17.02	-1.05	15.97	34.77	-18.80
707.50	1.4	QPSK	V	150	86	1 / 0	17.04	-1.02	16.02	34.77	-18.75
715.30	1.4	QPSK	V	150	98	1 / 0	17.33	-0.99	16.34	34.77	-18.43
715.30	1.4	16-QAM	V	150	98	1 / 0	16.66	-0.99	15.67	34.77	-19.10
715.30	1.4	64-QAM	V	150	98	1 / 0	15.43	-0.99	14.44	34.77	-20.33
700.50	3	QPSK	V	150	96	1 / 0	16.88	-1.05	15.83	34.77	-18.94
707.50	3	QPSK	V	150	95	1 / 0	16.94	-1.02	15.92	34.77	-18.85
714.50	3	QPSK	V	150	97	1 / 0	17.23	-0.99	16.24	34.77	-18.53
714.50	3	16-QAM	V	150	97	1 / 0	16.73	-0.99	15.74	34.77	-19.03
714.50	3	64-QAM	V	150	97	1 / 0	15.79	-0.99	14.80	34.77	-19.97

Table 7-2. ERP Data (Band 12)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBd]	ERP [dBm]	ERP Limit [dBm]	Margin [dB]
701.50	5	QPSK	V	150	100	1 / 24	17.11	-1.04	16.07	34.77	-18.71
707.50	5	QPSK	V	150	101	1 / 0	17.10	-1.02	16.08	34.77	-18.69
713.50	5	QPSK	V	150	91	1 / 24	17.07	-1.00	16.07	34.77	-18.70
707.50	5	16-QAM	V	150	101	1 / 0	16.36	-1.02	15.34	34.77	-19.43
707.50	5	64-QAM	V	150	101	1 / 0	15.20	-1.02	14.18	34.77	-20.59
704.00	10	QPSK	V	150	94	1 / 0	17.38	-1.03	16.35	34.77	-18.42
707.50	10	QPSK	V	150	101	1 / 0	16.98	-1.02	15.96	34.77	-18.81
711.00	10	QPSK	V	150	106	1 / 49	16.99	-1.01	15.98	34.77	-18.79
704.00	10	16-QAM	V	150	94	1 / 0	16.33	-1.03	15.30	34.77	-19.47
704.00	10	64-QAM	V	150	94	1 / 0	15.28	-1.03	14.25	34.77	-20.52
704.00	10	QPSK	H	150	78	1 / 0	17.00	-0.99	16.01	34.77	-18.76
704.00	10 (WCP)	QPSK	V	150	1	1 / 0	16.49	-0.99	15.50	34.77	-19.27

Table 7-3. ERP Data (Band 12/17)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBd]	ERP [dBm]	ERP Limit [dBm]	Margin [dB]
779.50	5	QPSK	V	150	250	1 / 0	18.13	-0.83	17.30	34.77	-17.47
782.00	5	QPSK	V	150	246	1 / 0	18.08	-0.82	17.26	34.77	-17.51
784.50	5	QPSK	V	150	241	1 / 24	17.55	-0.81	16.74	34.77	-18.03
779.50	5	16-QAM	V	150	250	1 / 0	17.47	-0.83	16.64	34.77	-18.13
779.50	5	64-QAM	V	150	250	1 / 0	16.21	-0.83	15.38	34.77	-19.39
782.00	10	QPSK	V	150	251	1 / 49	17.70	-0.82	16.88	34.77	-17.89
782.00	10	16-QAM	V	150	251	1 / 49	16.85	-0.82	16.03	34.77	-18.74
782.00	10	64-QAM	V	150	251	1 / 49	15.87	-0.82	15.05	34.77	-19.72
779.50	5	QPSK	H	150	3	1 / 0	17.69	-0.83	16.86	34.77	-17.91
779.50	5 (WCP)	QPSK	V	150	253	1 / 0	17.54	-0.83	16.71	34.77	-18.06

Table 7-4. ERP Data (Band 13)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBd]	ERP [dBm]	ERP Limit [dBm]	Margin [dB]
824.70	1.4	QPSK	H	150	60	1 / 0	18.39	-0.65	17.74	38.45	-20.71
836.50	1.4	QPSK	H	150	74	1 / 0	18.33	-0.65	17.68	38.45	-20.77
848.30	1.4	QPSK	H	150	98	1 / 0	18.53	-0.65	17.88	38.45	-20.57
848.30	1.4	16-QAM	H	150	98	1 / 0	17.84	-0.65	17.19	38.45	-21.26
848.30	1.4	64-QAM	H	150	98	1 / 0	17.01	-0.65	16.36	38.45	-22.09
825.50	3	QPSK	H	150	66	1 / 0	18.97	-0.65	18.32	38.45	-20.13
836.50	3	QPSK	H	150	65	1 / 0	18.69	-0.65	18.04	38.45	-20.41
847.50	3	QPSK	H	150	66	1 / 0	18.77	-0.65	18.12	38.45	-20.33
825.50	3	16-QAM	H	150	66	1 / 0	17.95	-0.65	17.30	38.45	-21.15
825.50	3	64-QAM	H	150	66	1 / 0	16.94	-0.65	16.29	38.45	-22.16
826.50	5	QPSK	H	150	71	1 / 24	18.57	-0.65	17.92	38.45	-20.53
836.50	5	QPSK	H	150	66	1 / 0	18.58	-0.65	17.93	38.45	-20.52
846.50	5	QPSK	H	150	76	1 / 0	18.40	-0.65	17.75	38.45	-20.70
836.50	5	16-QAM	H	150	66	1 / 0	17.74	-0.65	17.09	38.45	-21.36
836.50	5	64-QAM	H	150	66	1 / 0	16.88	-0.65	16.23	38.45	-22.22
829.00	10	QPSK	H	150	68	1 / 0	18.54	-0.65	17.89	38.45	-20.56
836.50	10	QPSK	H	150	62	1 / 0	18.42	-0.65	17.77	38.45	-20.68
844.00	10	QPSK	H	150	65	1 / 0	18.39	-0.65	17.74	38.45	-20.71
829.00	10	16-QAM	H	150	68	1 / 0	17.86	-0.65	17.21	38.45	-21.24
829.00	10	64-QAM	H	150	68	1 / 0	16.34	-0.65	15.69	38.45	-22.76
831.50	15	QPSK	H	150	79	1 / 74	18.67	-0.65	18.02	38.45	-20.43
836.50	15	QPSK	H	150	64	1 / 0	18.59	-0.65	17.94	38.45	-20.51
841.50	15	QPSK	H	150	72	1 / 0	18.22	-0.65	17.57	38.45	-20.88
831.50	15	16-QAM	H	150	79	1 / 74	17.56	-0.65	16.91	38.45	-21.54
831.50	15	64-QAM	H	150	79	1 / 74	16.62	-0.65	15.97	38.45	-22.48
825.50	3	QPSK	V	150	112	1 / 0	18.30	-0.65	17.65	38.45	-20.80
825.50	3 (WCP)	QPSK	H	150	359	1 / 0	17.41	-0.65	16.76	38.45	-21.69

Table 7-5. ERP Data (Band 5/26)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Margin [dB]
1710.70	1.4	QPSK	H	150	340	1 / 0	18.94	5.56	24.50	30.00	-5.50
1732.50	1.4	QPSK	H	150	331	1 / 5	19.79	5.41	25.20	30.00	-4.80
1754.30	1.4	QPSK	H	150	335	1 / 0	17.92	5.26	23.18	30.00	-6.82
1732.50	1.4	16-QAM	H	150	331	1 / 5	18.96	5.41	24.37	30.00	-5.63
1732.50	1.4	64-QAM	H	150	331	1 / 5	17.82	5.41	23.23	30.00	-6.77
1711.50	3	QPSK	H	150	329	1 / 0	19.99	5.55	25.54	30.00	-4.46
1732.50	3	QPSK	H	150	332	1 / 0	19.54	5.41	24.95	30.00	-5.05
1753.50	3	QPSK	H	150	324	1 / 0	18.05	5.26	23.31	30.00	-6.69
1711.50	3	16-QAM	H	150	329	1 / 0	19.23	5.55	24.78	30.00	-5.22
1711.50	3	64-QAM	H	150	329	1 / 0	18.09	5.55	23.64	30.00	-6.36
1712.50	5	QPSK	H	150	327	1 / 0	19.76	5.55	25.31	30.00	-4.69
1732.50	5	QPSK	H	150	328	1 / 24	19.47	5.41	24.88	30.00	-5.12
1752.50	5	QPSK	H	150	329	1 / 0	18.68	5.27	23.95	30.00	-6.05
1712.50	5	16-QAM	H	150	327	1 / 0	18.97	5.55	24.52	30.00	-5.48
1712.50	5	64-QAM	H	150	327	1 / 0	17.89	5.55	23.44	30.00	-6.56
1715.00	10	QPSK	H	150	333	1 / 0	19.73	5.53	25.26	30.00	-4.74
1732.50	10	QPSK	H	150	330	1 / 0	19.61	5.41	25.02	30.00	-4.98
1750.00	10	QPSK	H	150	331	1 / 0	18.95	5.29	24.24	30.00	-5.76
1715.00	10	16-QAM	H	150	333	1 / 0	19.00	5.53	24.53	30.00	-5.47
1715.00	10	64-QAM	H	150	333	1 / 0	17.76	5.53	23.29	30.00	-6.71
1717.50	15	QPSK	H	150	330	1 / 0	20.07	5.51	25.58	30.00	-4.42
1732.50	15	QPSK	H	150	329	1 / 0	19.74	5.41	25.15	30.00	-4.85
1747.50	15	QPSK	H	150	332	1 / 0	19.01	5.31	24.32	30.00	-5.68
1717.50	15	16-QAM	H	150	330	1 / 0	19.44	5.51	24.95	30.00	-5.05
1717.50	15	64-QAM	H	150	330	1 / 0	18.47	5.51	23.98	30.00	-6.02
1720.00	20	QPSK	H	150	331	1 / 0	20.03	5.49	25.52	30.00	-4.48
1732.50	20	QPSK	H	150	332	1 / 0	19.98	5.41	25.39	30.00	-4.61
1745.00	20	QPSK	H	150	329	1 / 0	19.43	5.32	24.75	30.00	-5.25
1720.00	20	16-QAM	H	150	331	1 / 0	19.07	5.49	24.56	30.00	-5.44
1720.00	20	64-QAM	H	150	331	1 / 0	18.32	5.49	23.81	30.00	-6.19
1717.50	15	QPSK	V	150	6	1 / 0	18.75	5.57	24.32	30.00	-5.68
1717.50	15 (WCP)	QPSK	H	150	328	1 / 0	17.10	5.51	22.61	30.00	-7.39

Table 7-6. EIRP Data (Band 4)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Margin [dB]
1850.70	1.4	QPSK	H	150	351	3 / 2	17.48	4.82	22.30	33.01	-10.71
1882.50	1.4	QPSK	H	150	339	3 / 2	18.86	4.73	23.59	33.01	-9.42
1914.30	1.4	QPSK	H	150	344	1 / 0	18.30	4.68	22.98	33.01	-10.03
1882.50	1.4	16-QAM	H	150	339	3 / 2	17.94	4.73	22.67	33.01	-10.34
1882.50	1.4	64-QAM	H	150	339	3 / 2	17.05	4.73	21.78	33.01	-11.23
1851.50	3	QPSK	H	150	334	1 / 0	19.46	4.82	24.28	33.01	-8.73
1882.50	3	QPSK	H	150	337	1 / 0	19.24	4.73	23.97	33.01	-9.04
1913.50	3	QPSK	H	150	331	1 / 0	20.65	4.68	25.33	33.01	-7.68
1913.50	3	16-QAM	H	150	331	1 / 0	19.76	4.68	24.44	33.01	-8.57
1913.50	3	64-QAM	H	150	331	1 / 0	18.46	4.68	23.14	33.01	-9.87
1852.50	5	QPSK	H	150	328	1 / 0	19.61	4.81	24.42	33.01	-8.59
1882.50	5	QPSK	H	150	328	1 / 0	20.07	4.73	24.80	33.01	-8.21
1912.50	5	QPSK	H	150	331	1 / 0	20.67	4.68	25.35	33.01	-7.66
1912.50	5	16-QAM	H	150	331	1 / 0	19.77	4.68	24.45	33.01	-8.56
1912.50	5	64-QAM	H	150	331	1 / 0	18.85	4.68	23.53	33.01	-9.48
1855.00	10	QPSK	H	150	327	1 / 0	19.81	4.81	24.62	33.01	-8.39
1882.50	10	QPSK	H	150	328	1 / 0	20.20	4.73	24.93	33.01	-8.08
1910.00	10	QPSK	H	150	327	1 / 0	20.77	4.68	25.45	33.01	-7.56
1910.00	10	16-QAM	H	150	327	1 / 0	19.01	4.68	23.69	33.01	-9.32
1910.00	10	64-QAM	H	150	327	1 / 0	18.16	4.68	22.84	33.01	-10.17
1857.50	15	QPSK	H	150	328	1 / 0	19.32	4.80	24.12	33.01	-8.89
1882.50	15	QPSK	H	150	325	1 / 0	19.89	4.73	24.62	33.01	-8.39
1907.50	15	QPSK	H	150	326	1 / 0	20.22	4.68	24.90	33.01	-8.11
1907.50	15	16-QAM	H	150	326	1 / 0	19.20	4.68	23.88	33.01	-9.13
1907.50	15	64-QAM	H	150	326	1 / 0	18.37	4.68	23.05	33.01	-9.96
1860.00	20	QPSK	H	150	327	1 / 99	20.07	4.79	24.86	33.01	-8.15
1882.50	20	QPSK	H	150	328	1 / 0	20.29	4.73	25.02	33.01	-7.99
1905.00	20	QPSK	H	150	329	1 / 0	20.36	4.68	25.04	33.01	-7.97
1882.50	20	16-QAM	H	150	328	1 / 0	19.05	4.73	23.78	33.01	-9.23
1882.50	20	64-QAM	H	150	328	1 / 0	18.11	4.73	22.84	33.01	-10.17
1910.00	10	QPSK	V	150	1	1 / 0	17.89	4.86	22.75	33.01	-10.26
1910.00	10 (WCP)	QPSK	H	150	336	1 / 0	17.06	4.68	21.74	33.01	-11.27

Table 7-7. EIRP Data (Band 2/25)

Frequency [MHz]	Channel Bandwidth [MHz]	Mod.	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	RB Size/Offset	Substitute Level [dBm]	Ant. Gain [dBi]	EIRP [dBm]	EIRP Limit [dBm]	Margin [dB]
2498.50	5	QPSK	V	150	8	1 / 24	18.61	5.59	24.20	33.01	-8.81
2593.00	5	QPSK	V	150	310	1 / 0	20.32	6.27	26.59	33.01	-6.42
2687.50	5	QPSK	V	150	6	1 / 0	18.27	6.47	24.74	33.01	-8.27
2593.00	5	16-QAM	V	150	310	1 / 24	18.28	6.27	24.55	33.01	-8.46
2593.00	5	64-QAM	V	150	310	1 / 24	16.80	6.27	23.07	33.01	-9.94
2501.00	10	QPSK	V	150	306	1 / 0	19.27	5.60	24.87	33.01	-8.14
2593.00	10	QPSK	V	150	311	1 / 0	20.77	6.27	27.04	33.01	-5.97
2685.00	10	QPSK	V	150	311	1 / 0	17.97	6.46	24.43	33.01	-8.58
2593.00	10	16-QAM	V	150	311	1 / 0	19.65	6.27	25.92	33.01	-7.09
2593.00	10	64-QAM	V	150	311	1 / 0	18.46	6.27	24.73	33.01	-8.28
2503.50	15	QPSK	V	150	3	1 / 0	19.64	5.61	25.25	33.01	-7.76
2593.00	15	QPSK	V	150	6	1 / 0	19.86	6.27	26.13	33.01	-6.88
2682.50	15	QPSK	V	150	310	1 / 74	18.66	6.46	25.12	33.01	-7.89
2503.50	15	16-QAM	V	150	3	1 / 0	18.91	5.61	24.52	33.01	-8.49
2503.50	15	64-QAM	V	150	3	1 / 0	17.80	5.61	23.41	33.01	-9.60
2506.00	20	QPSK	V	150	8	1 / 99	18.98	5.63	24.61	33.01	-8.40
2593.00	20	QPSK	V	150	4	1 / 0	20.78	6.27	27.05	33.01	-5.96
2680.00	20	QPSK	V	150	315	1 / 99	18.13	6.46	24.59	33.01	-8.42
2593.00	20	16-QAM	V	150	4	1 / 0	19.70	6.27	25.97	33.01	-7.04
2593.00	20	64-QAM	V	150	4	1 / 0	18.94	6.27	25.21	33.01	-7.80
2593.00	20	QPSK	H	150	196	1 / 0	19.12	6.27	25.39	33.01	-7.62
2593.00	20 (WCP)	QPSK	V	150	317	1 / 0	20.00	6.27	26.27	33.01	-6.74
2593.00	20(PC3)	QPSK	V	150	310	1 / 0	18.25	6.27	24.52	33.01	-8.49

Table 7-8. EIRP Data (Band 41)

7.3 Radiated Spurious Emissions Measurements

§2.1053 §22.917(a) §24.238(a) §27.53(c) §27.53(f) §27.53(g) §27.53(h) §27.53(m)

Test Overview

Radiated spurious emissions measurements are performed using the substitution method described in ANSI/TIA-603-D-2010 with the EUT transmitting into an integral antenna. Measurements on signals operating below 1GHz are performed using vertically and horizontally polarized tuned dipole antennas. Measurements on signals operating above 1GHz are performed using vertically and horizontally polarized broadband horn antennas.

Test Procedures Used

KDB 971168 D01 v02r02 – Section 5.8

ANSI/TIA-603-D-2010 – Section 2.2.12

Test Settings

1. RBW = 100kHz for emissions below 1GHz and 1MHz for emissions above 1GHz
2. VBW ≥ 3 x RBW
3. Span = 1.5 times the OBW
4. No. of sweep points ≥ 2 x span / RBW
5. Detector = RMS
6. Trace mode = Average (Max Hold for pulsed emissions)
7. The trace was allowed to stabilize

Test Setup

The EUT and measurement equipment were set up as shown in the diagram below.

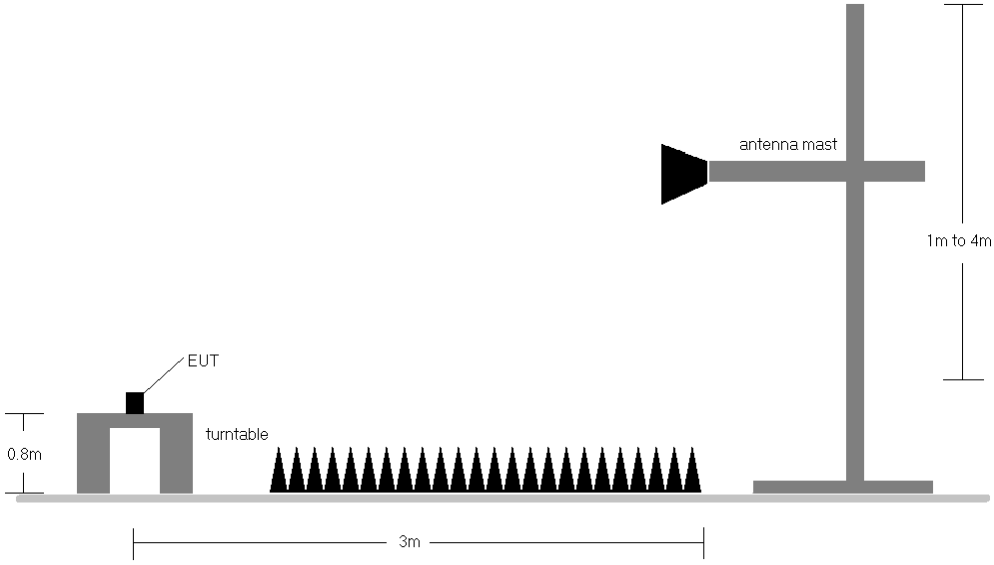


Figure 7-3. Test Instrument & Measurement Setup

Test Notes

1) The EUT was tested in three orthogonal planes and in all possible test configurations and positioning. The worst case emissions are reported with the EUT positioning, modulations, RB sizes and offsets, and channel bandwidth configurations shown in the tables below.

2) This unit was tested with its standard battery.

3) The spectrum is measured from 9kHz to the 10th harmonic of the fundamental frequency of the transmitter. The worst-case emissions are reported.

4) Emissions below 18GHz were measured at a 3 meter test distance while emissions above 18GHz were measured at a 1 meter test distance with the application of a distance correction factor.

5) The "-" shown in the following RSE tables are used to denote a noise floor measurement.

OPERATING FREQUENCY:	704.00	MHz		
CHANNEL:	23060			
MEASURED OUTPUT POWER:	16.35	dBm	=	0.043 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	10.0	MHz		
DISTANCE:	3	meters		
LIMIT:	$43 + 10 \log_{10}(W)$ =	29.35	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBd]	Spurious Emission Level [dBm]	[dBc]
1408.00	H	-	-	-69.96	5.63	-64.33	80.7
2112.00	H	-	-	-66.65	6.01	-60.65	77.0

Table 7-9. Radiated Spurious Data (Band 12/17 – Low Channel)

OPERATING FREQUENCY:	707.50	MHz		
CHANNEL:	23095			
MEASURED OUTPUT POWER:	15.96	dBm	=	0.039 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	10.0	MHz		
DISTANCE:	3	meters		
LIMIT:	$43 + 10 \log_{10}(W)$ =	28.96	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBd]	Spurious Emission Level [dBm]	[dBc]
1415.00	H	-	-	-70.21	5.70	-64.51	80.5
2122.50	H	-	-	-66.87	6.16	-60.72	76.7

Table 7-10. Radiated Spurious Data (Band 12/17 – Mid Channel)

OPERATING FREQUENCY:	711.00	MHz		
CHANNEL:	23130			
MEASURED OUTPUT POWER:	15.98	dBm	=	0.040 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	10.0	MHz		
DISTANCE:	3	meters		
LIMIT:	$43 + 10 \log_{10} (W) =$	28.98	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBd]	Spurious Emission Level [dBm]	[dBc]
1422.00	H	-	-	-70.10	5.76	-64.34	80.3
2133.00	H	-	-	-67.21	6.31	-60.90	76.9

Table 7-11. Radiated Spurious Data (Band 12/17 – High Channel)

OPERATING FREQUENCY:	704.00	MHz		
CHANNEL:	23060			
MEASURED OUTPUT POWER:	15.50	dBm	=	0.035 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	10.0	MHz		
DISTANCE:	3	meters		
LIMIT:	$43 + 10 \log_{10} (W) =$	28.50	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBd]	Spurious Emission Level [dBm]	[dBc]
1408.00	H	147	286	-75.60	5.82	-69.78	85.3
2112.00	H	194	244	-69.84	6.84	-63.00	78.5
2816.00	H	-	-	-73.61	7.87	-65.74	81.2

Table 7-12. Radiated Spurious Data with WCP (Band 12/17 – Low Channel)

OPERATING FREQUENCY:	779.50	MHz		
CHANNEL:	23205			
MEASURED OUTPUT POWER:	17.30	dBm	=	0.054 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	5.0	MHz		
DISTANCE:	3	meters		
LIMIT:	$43 + 10 \log_{10} (W) =$	30.30	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBd]	Spurious Emission Level [dBm]	[dBc]
2338.50	H	150	106	-64.21	7.32	-56.90	74.2
3118.00	H	-	-	-67.84	7.95	-59.89	77.2

Table 7-13. Radiated Spurious Data (Band 13 – Low Channel)

OPERATING FREQUENCY:	782.00	MHz		
CHANNEL:	23230			
MEASURED OUTPUT POWER:	17.26	dBm	=	0.053 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	5.0	MHz		
DISTANCE:	3	meters		
LIMIT:	$43 + 10 \log_{10} (W) =$	30.26	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBd]	Spurious Emission Level [dBm]	[dBc]
2346.00	H	150	109	-63.59	7.35	-56.24	73.5
3128.00	H	-	-	-65.49	7.95	-57.55	74.8

Table 7-14. Radiated Spurious Data (Band 13 – Mid Channel)

OPERATING FREQUENCY:	784.50	MHz		
CHANNEL:	23255			
MEASURED OUTPUT POWER:	16.74	dBm	=	0.047 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	5.0	MHz		
DISTANCE:	3	meters		
LIMIT:	43 + 10 $\log_{10}$ (W) =	29.74	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBd]	Spurious Emission Level [dBm]	[dBc]
2353.50	H	150	107	-65.32	7.38	-57.94	74.7
3138.00	H	-	-	-65.48	7.94	-57.54	74.3

Table 7-15. Radiated Spurious Data (Band 13 – High Channel)

MODULATION SIGNAL:	QPSK	
BANDWIDTH:	5.00	MHz
DISTANCE:	3	meters
NARROWBAND EMISSION LIMIT:	-50	dBm
WIDEBAND EMISSION LIMIT:	-40	dBm/MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBd]	Spurious Emission Level [dBm]	Margin [dB]
1559.00	H	-	-	-70.41	6.35	-64.06	-24.1
1564.00	H	-	-	-70.79	6.38	-64.41	-24.4
1569.00	H	-	-	-70.48	6.40	-64.08	-24.1

Table 7-16. Radiated Spurious Data (Band 13 – 1559-1610MHz Band)

OPERATING FREQUENCY:	779.50	MHz		
CHANNEL:	23205			
MEASURED OUTPUT POWER:	16.71	dBm	=	0.047 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	5.0	MHz		
DISTANCE:	3	meters		
LIMIT:	43 + 10 $\log_{10}$ (W) =	29.71	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBd]	Spurious Emission Level [dBm]	[dBc]
2338.50	H	151	32	-59.15	7.35	-51.80	68.5
3118.00	H	-	-	-65.60	7.19	-58.41	75.1

Table 7-17. Radiated Spurious Data with WCP (Band 13 – Low Channel)

MODULATION SIGNAL:	QPSK	
BANDWIDTH:	5.00	MHz
DISTANCE:	3	meters
NARROWBAND EMISSION LIMIT:	-50	dBm
WIDEBAND EMISSION LIMIT:	-40	dBm/MHz

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBd]	Spurious Emission Level [dBm]	Margin [dB]
1559.00	H	-	-	-72.18	6.55	-65.63	-25.6

Table 7-18. Radiated Spurious Data with WCP (Band 13 – 1559-1610MHz Band)

OPERATING FREQUENCY:	825.50	MHz		
CHANNEL:	26805			
MEASURED OUTPUT POWER:	18.32	dBm	=	0.068 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	3.0	MHz		
DISTANCE:	3	meters		
LIMIT:	43 + 10 $\log_{10}$ (W) =	31.32	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBd]	Spurious Emission Level [dBm]	[dBc]
1651.00	H	120	207	-75.82	6.70	-69.13	87.4
2476.50	H	115	227	-69.60	7.53	-62.07	80.4
3302.00	H	-	-	-70.82	7.37	-63.45	81.8

Table 7-19. Radiated Spurious Data (Band 5/26 – Low Channel)

OPERATING FREQUENCY:	836.50	MHz		
CHANNEL:	26915			
MEASURED OUTPUT POWER:	18.04	dBm	=	0.064 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	3.0	MHz		
DISTANCE:	3	meters		
LIMIT:	43 + 10 $\log_{10}$ (W) =	31.04	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBd]	Spurious Emission Level [dBm]	[dBc]
1673.00	H	146	201	-75.95	6.70	-69.25	87.3
2509.50	H	157	157	-67.48	7.63	-59.85	77.9
3346.00	H	-	-	-71.23	7.51	-63.72	81.8

Table 7-20. Radiated Spurious Data (Band 5/26 – Mid Channel)

OPERATING FREQUENCY:	847.50	MHz		
CHANNEL:	27025			
MEASURED OUTPUT POWER:	18.12	dBm	=	0.065 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	3.0	MHz		
DISTANCE:	3	meters		
LIMIT:	43 + 10 $\log_{10}$ (W) =	31.12	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBd]	Spurious Emission Level [dBm]	[dBc]
1695.00	H	150	136	-75.31	6.70	-68.61	86.7
2542.50	H	157	140	-66.76	7.60	-59.16	77.3
3390.00	H	-	-	-71.11	7.66	-63.45	81.6

Table 7-21. Radiated Spurious Data (Band 5/26 – High Channel)

OPERATING FREQUENCY:	825.50	MHz		
CHANNEL:	26805			
MEASURED OUTPUT POWER:	16.76	dBm	=	0.047 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	3.0	MHz		
DISTANCE:	3	meters		
LIMIT:	43 + 10 $\log_{10}$ (W) =	29.76	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBd]	Spurious Emission Level [dBm]	[dBc]
1651.00	H	-	-	-76.98	6.70	-70.29	87.0
2476.50	H	157	156	-67.64	7.53	-60.11	76.9
3302.00	H	-	-	-70.96	7.37	-63.59	80.4

Table 7-22. Radiated Spurious Data with WCP (Band 5/26 – Low Channel)

OPERATING FREQUENCY:	1717.50	MHz		
CHANNEL:	20025			
MEASURED OUTPUT POWER:	25.58	dBm	=	0.361 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	15.0	MHz		
DISTANCE:	3	meters		
LIMIT:	$43 + 10 \log_{10}(W)$ =	38.58	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	[dBc]
3435.00	H	169	132	-64.77	9.68	-55.09	80.7
5152.50	H	146	200	-65.96	10.89	-55.07	80.7
6870.00	H	-	-	-60.58	10.79	-49.78	75.4

Table 7-23. Radiated Spurious Data (Band 4 – Low Channel)

OPERATING FREQUENCY:	1732.50	MHz		
CHANNEL:	20175			
MEASURED OUTPUT POWER:	25.15	dBm	=	0.327 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	15.0	MHz		
DISTANCE:	3	meters		
LIMIT:	$43 + 10 \log_{10}(W)$ =	38.15	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	[dBc]
3465.00	H	173	115	-68.16	9.77	-58.38	83.5
5197.50	H	150	199	-66.44	10.81	-55.63	80.8
6930.00	H	-	-	-60.89	10.89	-50.01	75.2

Table 7-24. Radiated Spurious Data (Band 4 – Mid Channel)

OPERATING FREQUENCY:	1747.50	MHz		
CHANNEL:	20325			
MEASURED OUTPUT POWER:	24.32	dBm	=	0.270 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	15.0	MHz		
DISTANCE:	3	meters		
LIMIT:	$43 + 10 \log_{10}(W) =$	37.32	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	[dBc]
3495.00	H	173	137	-66.34	9.86	-56.47	80.8
5242.50	H	-	-	-66.32	10.89	-55.43	79.7

Table 7-25. Radiated Spurious Data (Band 4 – High Channel)

OPERATING FREQUENCY:	1717.50	MHz		
CHANNEL:	20025			
MEASURED OUTPUT POWER:	22.61	dBm	=	0.182 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	15.0	MHz		
DISTANCE:	3	meters		
LIMIT:	$43 + 10 \log_{10}(W) =$	35.61	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	[dBc]
3435.00	H	-	-	-68.73	9.88	-58.85	81.5
5152.50	H	-	-	-66.91	10.75	-56.16	78.8
6870.00	H	-	-	-60.29	11.69	-48.60	71.2

Table 7-26. Radiated Spurious Data with WCP (Band 4 – Low Channel)

OPERATING FREQUENCY:	1855.00	MHz		
CHANNEL:	26090			
MEASURED OUTPUT POWER:	24.62	dBm	=	0.289 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	10.0	MHz		
DISTANCE:	3	meters		
LIMIT:	43 + 10 $\log_{10}$ (W) =	37.62	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	[dBc]
3710.00	H	188	18	-68.07	9.99	-58.07	82.7
5565.00	H	-	-	-67.61	11.21	-56.40	81.0

Table 7-27. Radiated Spurious Data (Band 2/25 – Low Channel)

OPERATING FREQUENCY:	1882.50	MHz		
CHANNEL:	26365			
MEASURED OUTPUT POWER:	24.93	dBm	=	0.311 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	10.0	MHz		
DISTANCE:	3	meters		
LIMIT:	43 + 10 $\log_{10}$ (W) =	37.93	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	[dBc]
3765.00	H	165	59	-67.47	9.76	-57.70	82.6
5647.50	H	-	-	-67.97	11.36	-56.61	81.5

Table 7-28. Radiated Spurious Data (Band 2/25 – Mid Channel)

OPERATING FREQUENCY:	1910.00	MHz		
CHANNEL:	26640			
MEASURED OUTPUT POWER:	25.45	dBm	=	0.351 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	10.0	MHz		
DISTANCE:	3	meters		
LIMIT:	$43 + 10 \log_{10}(W) =$	38.45	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	[dBc]
3820.00	H	164	51	-65.37	9.56	-55.81	81.3
5730.00	H	-	-	-67.51	11.43	-56.08	81.5

Table 7-29. Radiated Spurious Data (Band 2/25 – High Channel)

OPERATING FREQUENCY:	1910.00	MHz		
CHANNEL:	26640			
MEASURED OUTPUT POWER:	21.74	dBm	=	0.149 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	10.0	MHz		
DISTANCE:	3	meters		
LIMIT:	$43 + 10 \log_{10}(W) =$	34.74	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	[dBc]
3820.00	H	165	59	-67.12	9.32	-57.80	79.5
5730.00	H	-	-	-66.24	11.37	-54.87	76.6

Table 7-30. Radiated Spurious Data with WCP (Band 2/25 – High Channel)

OPERATING FREQUENCY:	2506.00	MHz		
CHANNEL:	39750			
MEASURED OUTPUT POWER:	24.61	dBm	=	0.289 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	20.0	MHz		
DISTANCE:	3	meters		
LIMIT:	55 + 10 log10 (W)	49.61	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	[dBc]
5012.00	H	302	324	-55.02	10.70	-44.33	68.9
7518.00	H	350	58	-56.03	9.59	-46.43	71.0
10024.00	H	58	327	-49.64	11.30	-38.34	63.0
12530.00	H	-	-	-60.51	13.00	-47.51	72.1
15036.00	H	-	-	-59.68	14.69	-44.99	69.6
17542.00	H	31	48	-56.19	13.70	-42.49	67.1

Table 7-31. Radiated Spurious Data (Band 41 – Low Channel)

OPERATING FREQUENCY:	2593.00	MHz		
CHANNEL:	40620			
MEASURED OUTPUT POWER:	27.05	dBm	=	0.507 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	20.0	MHz		
DISTANCE:	3	meters		
LIMIT:	55 + 10 log10 (W)	52.05	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	[dBc]
5186.00	H	294	339	-49.83	10.85	-38.98	66.0
7779.00	H	90	317	-54.04	10.42	-43.61	70.7
10372.00	H	316	341	-49.89	11.55	-38.34	65.4
12965.00	H	-	-	-58.73	12.27	-46.46	73.5
15558.00	H	333	40	-54.79	15.10	-39.69	66.7

Table 7-32. Radiated Spurious Data (Band 41 – Mid Channel)

OPERATING FREQUENCY:	2680.00	MHz		
CHANNEL:	41490			
MEASURED OUTPUT POWER:	24.59	dBm	=	0.288 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	20.0	MHz		
DISTANCE:	3	meters		
LIMIT:	55 + 10 log10 (W)	49.59	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	[dBc]
5360.00	H	18	319	-52.03	10.80	-41.23	65.8
8040.00	H	74	301	-58.42	10.47	-47.94	72.5
10720.00	H	305	310	-58.09	11.90	-46.19	70.8
13400.00	H	-	-	-57.92	11.90	-46.02	70.6
16080.00	H	2	49	-55.46	14.75	-40.71	65.3

Table 7-33. Radiated Spurious Data (Band 41 – High Channel)

OPERATING FREQUENCY:	2593.00	MHz		
CHANNEL:	40620			
MEASURED OUTPUT POWER:	26.27	dBm	=	0.424 W
MODULATION SIGNAL:	QPSK			
BANDWIDTH:	20.0	MHz		
DISTANCE:	3	meters		
LIMIT:	55 + 10 log10 (W)	51.27	dBc	

Frequency [MHz]	Ant. Pol. [H/V]	Antenna Height [cm]	Turntable Azimuth [degree]	Level at Antenna Terminals [dBm]	Substitute Antenna Gain [dBi]	Spurious Emission Level [dBm]	[dBc]
5186.00	H	295	319	-50.89	10.85	-40.04	66.3
7779.00	H	313	55	-55.13	10.42	-44.71	71.0
10372.00	H	0	50	-54.62	11.55	-43.07	69.3
12965.00	H	-	-	-58.53	12.27	-46.26	72.5
15558.00	H	333	43	-55.71	15.10	-40.61	66.9

Table 7-34. Radiated Spurious Data with WCP (Band 41 – Mid Channel)

8.0 CONCLUSION

The data collected relate only to the item(s) tested and show that the **LG Portable Handset FCC ID: ZNFLS998** complies with all the requirements of Parts 22, 24, & 27 of the FCC rules for LTE operation only.