

**RADIATED POWER ANALYSIS REPORT
FROM
RFI GLOBAL SERVICES LTD**

Test of: XE500T1C

FCC ID (SKU 1): A3LXE500T1C-N + Contian FCC ID:A3LEM7700-W;

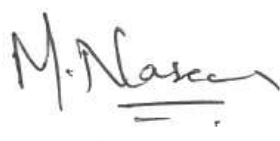
To: KDB 412172 D01 v01

Report Serial No: RFI-SAR-RPA89958JD01E V2.0

This Test Report Is Issued Under The Authority
Of Richelieu Quoi, SAR Technology Consultant:


(APPROVED SIGNATORY)

Checked By:


(APPROVED SIGNATORY)

Issue Date:

17 October 2012

Test Dates:

21 August to 06 September 2012

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1. Customer Information

Company Name:	Samsung Electronics Co., Ltd
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Address:	416, Maetan-3Dong, Yeongtong-Gu, Suwon-City, Gyeonggi-Do, 443-742, Korea
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2. Equipment Under Test (EUT)

2.1. Identification of Equipment Under Test (EUT)

Description:	SKU1: Tablet PC
Brand Name:	Samsung
Model Name or Number:	XE500T1C
Serial Number:	HX2W91SC700010A
IMEI Number:	0-13232000029961
Hardware Version Number:	PV
Software Version Number:	Windows 8 Operating System
SKU1 FCC ID Number:	A3LXE500T1C-N + Contain FCC ID:A3LEM7700-W
Country of Manufacture:	None Stated
Date of Receipt:	17 August 2012

Note(s):

This sample was used to perform WWAN SAR evaluation measurements. The sample supports simultaneous transmission with the WWAN and WLAN antenna > 5 cm apart. Wireless Personal Hotspot is also supported and was evaluated as per KDB 941225 D06 "Hot Spot SAR v01".

Description:	SKU1: Tablet PC
Brand Name:	Samsung
Model Name or Number:	XE500T1C
Serial Number:	C2012062600001
IMEI Number:	0-13232000028757
Hardware Version Number:	PV
Software Version Number:	Windows 8 Operating System
SKU1 FCC ID Number:	A3LXE500T1C-N + Contain FCC ID:A3LEM7700-W
Country of Manufacture:	None Stated
Date of Receipt:	17 August 2012

Note(s):

This sample was used to perform WWAN conducted power measurements only. The sample supports simultaneous transmission with the WWAN and WLAN antenna > 5 cm apart. Wireless Personal Hotspot is also supported and was evaluated as per KDB 941225 D06 "Hot Spot SAR v01". A conducted port was available to perform measurements.

2.2. Description of EUT

The equipment under test a Tablet PCs with:

Tablet 1 (SKU 1) supporting power reduction sensor and grip sensor operating on the 3G (FDD 2 & FDD 5), LTE (Band 4 & 17) only. With *Bluetooth*, NFC, WiFi 2.4 GHz and WiFi 5.0 GHz Bands. For 3GPP support the EUT is capable of operating on Release 5 and Release 6 connections.

The EUT SKU1: was used to evaluate WWAN

2.3. Modifications Incorporated in the EUT

EUT (IMEI: 013232000029961) was used for WWAN UMTS FDD 2, FDD 5, LTE 4, LTE 17 SAR measurements.

EUT (IMEI: 013232000028757) was used for WWAN UMTS FDD 2, FDD 5, LTE 4, LTE 17 conducted power measurements. The power measurements were also re-verified using the Radiated EUT (IMEI: 013232000029961) and both samples measures identical conducted average output power levels with ≤ 0.1 dB tolerance.

Both EUT are tuned identically and the test software used determines the test mode to be tested.

2.4. Accessories

The following accessories were supplied with the EUT during testing:

Description:	Memory Card
Brand Name:	None Stated (Generic)
Model Name or Number:	None Stated
Serial Number:	None Stated
Cable Length and Type:	Not Applicable
Country of Manufacture:	China
Connected to Port	Dedicated Micro SD Slot

2.5. Support Equipment

The following support equipment was used to exercise the EUT during testing:

Description:	Wireless Communication Test Set
Brand Name:	Agilent
Model Name or Number:	8960 Series 10
Serial Number:	GB46311280

Description:	Wireless Communication Test Set
Brand Name:	Agilent
Model Name or Number:	8960 Series 10
Serial Number:	GB462000666

Description:	Radio Communication Analyzer
Brand Name:	Anritsu
Model Name or Number:	MT8820C
Serial Number:	6200938937

Description:	Dual Channel Power Meter
Brand Name:	Rohde & Schwarz
Model Name or Number:	NRVD
Serial Number:	863715/030

2.6. Additional Information Related to Testing

Equipment Category	UMTS (FDD 2, FDD 5) LTE (Band 4, Band 17) WiFi802.11 a/b/g/n <i>Bluetooth</i>			
Type of Unit	Portable Transceiver			
Intended Operating Environment:	General Population/Uncontrolled limits			
Transmitter Maximum Output Power Characteristics:	UMTS FDD 2	Communication Test Set configured to allow to EUT to transmit at a maximum power as per KDB 941225 D01.		
	UMTS FDD 5	Communication Test Set configured to allow to EUT to transmit at a maximum power as per KDB 941225 D01.		
	LTE Band 4	Communication Test Set configured to allow to EUT to transmit at a maximum power as per KDB 941225 D05.		
	LTE Band 17	Communication Test Set configured to allow to EUT to transmit at a maximum power as per KDB 941225 D05.		
Transmitter Frequency Range:	UMTS FDD 2	1852 to 1908 MHz		
	UMTS FDD 5	826 to 847 MHz		
	LTE Band 4	1715 To 1750 MHz		
	LTE Band 17	709 to 711 MHz		
Transmitter Frequency Allocation of EUT When Under Test:	Bands	Channel Number	Channel Description	Frequency (MHz)
	UMTS FDD 2	9262	Low	1852.4
		9400	Middle	1880.0
		9538	High	1907.6
	UMTS FDD 5	4132	Low	826.4
		4183	Middle	836.6
		4233	High	846.6
	LTE Band 4	20000	Low	1715.0
		20175	Middle	1732.5
		20350	High	1750.0
	LTE Band 17	23780	Low	709.0
23790		Middle	710.0	
23800		High	711.0	

Additional Information Related to Testing (Continue)

Modulation(s):	QPSK (UMTS / LTE): 0 Hz - Duty Factor modulating frequency 16QAM (LTE): 0 Hz - Duty Factor modulating frequency
Modulation Scheme (Crest Factor):	QPSK (UMTS / LTE): 1 16QAM (LTE): 1
Antenna Type:	Internal integral
Antenna Length:	Unknown
Number of Antenna Positions:	1 Fixed (WWAN) 1 Fixed (NFC)
Power Supply Requirement:	Battery: 7.5V External Supply: 12V / 3.33A
Battery Type(s):	Li-Polymer

3. Test Specification, Methods and Procedures

3.1. Test Specification

Reference:	KDB 412172 D01 v01
Title:	Determining ERP and EIRP
Purpose of Test:	To determine EIRP and ERP based on measurements of output power at the antenna port and antenna gain.

3.2. Methods and Procedures Reference Documentation

The methods and procedures used were as detailed in:

KDB 412172 D01 Determining ERP and EIRP v01

3.3. Definition of Measurement Equipment

The measurement equipment used complied with the requirements of the standards referenced in the methods & procedures section above. Section 2.5 contains a list of the test equipment used.

4. Measurements and Derived Results

4.1. General Comments

This section contains analysis calculation only.

4.2. Calculated ERP/EIRP Average Power Measurement

Frequency (MHz)	Output Power Meas. ¹ (W)	Antenna Gain ² (dBi)	Calculated EIRP (W)	Calculated ERP (W)	Rule Part	Limit (W)
704-716	0.191	-2.19		0.070	27	3.00
824-849	0.182	-3.43		0.050	22H	7.00
1710-1755	0.200	1.21	0.264		27	1.00
1850-1910	0.195	0.87	0.238		24E	2.00

Note(s):

1. **Output Power Meas level** measured by RFI. These are the **conducted average output power** measurement performed as an part of the SAR test report, serial number 'RFI-SAR-RP89958JD01A V6.0'
2. **Antenna Gain** supplied by manufacturer.