

ELEMENT MATERIALS TECHNOLOGY

(formerly PCTEST)
7185 Oakland Mills Road, Columbia, MD 21046 USA
Tel. +1.410.290.6652 / Fax +1.410.290.6654
<http://www.element.com>



PART 0 SAR CHAR REPORT

Applicant Name:

Samsung Electronics Co., Ltd.
129, Samsung-ro, Maetan dong,
Yeongtong-gu, Suwon-si
Gyeonggi-do, 16677, Korea

Date of Testing:

08/27/2025 – 10/20/2025

Test Site/Location:

Element, Columbia, MD, USA

Document Serial No.:

1M2508250078-02.A3L

FCC ID:

A3LSMS948U

APPLICANT:

SAMSUNG ELECTRONICS CO., LTD

Report Type:

Part 0 SAR Characterization

DUT Type:

Portable Handset

Model(s):

SM-S948U

Additional Model:

SM-S948U1

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.

Test results reported herein relate only to the item(s) tested.

RJ Ortanez
Executive Vice President



FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	Page 1 of 12

REV 1.1
04/08/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact CT.Info@Element.com.

TABLE OF CONTENTS

1	DEVICE UNDER TEST	3
1.1	Device Overview	3
1.2	Time-Averaging for SAR and Power Density	4
1.3	Nomenclature for Part 0 Report	4
1.4	Bibliography	4
2	SAR AND POWER DENSITY MEASUREMENTS	5
2.1	SAR Definition	5
2.2	SAR Measurement Procedure	5
3	SAR CHARACTERIZATION	7
3.1	DSI and SAR Determination	7
3.2	SAR Design Target	7
3.3	SAR Char	8
4	EQUIPMENT LIST	10
5	MEASUREMENT UNCERTAINTIES	12
APPENDIX A: SAR TEST RESULTS FOR P_{Limit} CALCULATIONS		1

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	Page 2 of 12

REV 1.1
04/08/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact CT.Info@Element.com.

1 DEVICE UNDER TEST

1.1 Device Overview

Band & Mode	Operating Modes	Tx Frequency
GSM/GPRS/EDGE 850	Voice/Data	824.20 - 848.80 MHz
GSM/GPRS/EDGE 1900	Voice/Data	1850.20 - 1909.80 MHz
UMTS 850	Voice/Data	826.40 - 846.60 MHz
UMTS 1750	Voice/Data	1712.4 - 1752.6 MHz
UMTS 1900	Voice/Data	1852.4 - 1907.6 MHz
LTE Band 71	Voice/Data	665.5 - 695.5 MHz
LTE Band 12	Voice/Data	699.7 - 715.3 MHz
LTE Band 13	Voice/Data	779.5 - 784.5 MHz
LTE Band 14	Voice/Data	790.5 - 795.5 MHz
LTE Band 26	Voice/Data	814.7 - 848.3 MHz
LTE Band 5	Voice/Data	824.7 - 848.3 MHz
LTE Band 66	Voice/Data	1710.7 - 1779.3 MHz
LTE Band 4	Voice/Data	1710.7 - 1754.3 MHz
LTE Band 25	Voice/Data	1850.7 - 1914.3 MHz
LTE Band 2	Voice/Data	1850.7 - 1909.3 MHz
LTE Band 30	Voice/Data	2307.5 - 2312.5 MHz
LTE Band 7	Voice/Data	2502.5 - 2567.5 MHz
LTE Band 41	Voice/Data	2498.5 - 2687.5 MHz
LTE Band 38	Voice/Data	2572.5 - 2617.5 MHz
LTE Band 48	Voice/Data	3552.5 - 3697.5 MHz
NR Band n71	Voice/Data	665.5 - 695.5 MHz
NR Band n12	Voice/Data	701.5 - 713.5 MHz
NR Band n14	Voice/Data	790.5 - 795.5 MHz
NR Band n26	Voice/Data	816.5 - 846.5 MHz
NR Band n5	Voice/Data	826.5 - 846.5 MHz
NR Band n70	Voice/Data	1697.5 - 1707.5 MHz
NR Band n66	Voice/Data	1712.5 - 1777.5 MHz
NR Band n25	Voice/Data	1852.5 - 1912.5 MHz
NR Band n2	Voice/Data	1852.5 - 1907.5 MHz
NR Band n30	Voice/Data	2307.5 - 2312.5 MHz
NR Band n7	Voice/Data	2502.5 - 2567.5 MHz
NR Band n41	Voice/Data	2501.01 - 2685 MHz
NR Band n38	Voice/Data	2575 - 2615 MHz
NR Band n48	Voice/Data	3555 - 3694.98 MHz
NR Band n78	Voice/Data	3455.01 - 3544.98 MHz; 3705 - 3795 MHz
NR Band n77	Voice/Data	3455.01 - 3544.98 MHz; 3705 - 3975 MHz
NTN Band n255	Data	1629 - 1658 MHz
NR Band n258	Data	24250 - 24450 MHz; 24750 - 25250 MHz
NR Band n260	Data	37000 - 40000 MHz
NR Band n261	Data	27500 - 28350 MHz
2.4 GHz WIFI	Voice/Data	2412 - 2462 MHz
5 GHz WIFI	Voice/Data	U-NII-1: 5180 - 5240 MHz U-NII-2A: 5260 - 5320 MHz U-NII-2C: 5500 - 5720 MHz U-NII-3: 5745 - 5825 MHz U-NII-4: 5845 - 5885 MHz
6 GHz WIFI	Voice/Data	U-NII-5: 5935 - 6415 MHz U-NII-6: 6435 - 6515 MHz U-NII-7: 6535 - 6875 MHz U-NII-8: 6895 - 7115 MHz
2.4 GHz Bluetooth	Data	2402 - 2480 MHz
NFC	Data	13.56 MHz
UWB	Data	6489.6 - 7987.2 MHz
WPT	N/A	110 kHz - 145 kHz

This device uses the Qualcomm® Smart Transmit Plus, EFS v24 feature to control and manage transmitting power in real time and to ensure the time-averaged RF exposure is in compliance with the FCC requirement at all times for 2G/3G/4G/5G WWAN and WLAN/BT/NTN operations. Additionally, this device supports NFC/WPT technologies, but the output power of these modems is not controlled by the Smart Transmit algorithm.

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	Page 3 of 12

REV 1.1
04/08/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact CT.Info@Element.com.

1.2 Time-Averaging for SAR and Power Density

This device is enabled with Qualcomm® Smart Transmit Plus, EFS v24 algorithm to control and manage transmitting power in real time and to ensure that the time-averaged RF exposure from 2G/3G/4G/5G Sub-6 NR WWAN and WLAN/BT/NTN is in compliance with FCC requirements. This Part 0 report shows SAR characterization of WWAN radios for 2G/3G/4G/5G Sub-6 NR/WLAN/BT/NTN. Characterization is achieved by determining P_{limit} for 2G/3G/4G/5G Sub-6 NR/WLAN/BT/NTN that corresponds to the exposure design targets after accounting for all device design related uncertainties, i.e., SAR_design_target (< FCC SAR limit) for sub-6 radio. The SAR characterization is denoted as SAR Char in this report. Section 1.3 includes a nomenclature of the specific terms used in this report.

The compliance test under the static transmission scenario and simultaneous transmission analysis are reported in Part 1 report. The validation of the time-averaging algorithm and compliance under the dynamic (time-varying) transmission scenario for WWAN/WLAN/BT/NTN technologies are reported in Part 2 report (report SN could be found in Section 1.4 – Bibliography).

1.3 Nomenclature for Part 0 Report

Technology	Term	Description
2G/3G/4G/5G Sub-6 NR/WLAN/BT/NTN	P_{limit}	Power level that corresponds to the exposure design target (<i>SAR_design_target</i>) after accounting for all device design related uncertainties
	P_{max}	Maximum tune up output power
	<i>SAR_design_target</i>	Target SAR level < FCC SAR limit after accounting for all device design related uncertainties
	<i>SAR Char</i>	Table containing P_{limit} for all technologies and bands

1.4 Bibliography

Report Type	Report Serial Number
PD Part 0 Test Report	
RF Exposure Part 1 test Report	1M2508250078-01.A3L
PD Part 1 Test Report	1M2508250078-04.A3L
RF Exposure Part 2 Test Report	1M2508250078-03.A3L
RF Exposure Compliance Summary	1M2508250078-05.A3L

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	Page 4 of 12

REV 1.1
04/08/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact CT.Info@Element.com.

2.1 SAR Definition

Specific Absorption Rate is defined as the time derivative (rate) of the incremental energy (dU) absorbed by (dissipated in) an incremental mass (dm) contained in a volume element (dV) of a given density (ρ). It is also defined as the rate of RF energy absorption per unit mass at a point in an absorbing body (see Equation 2-1).

Equation 2-1
SAR Mathematical Equation

$$SAR = \frac{d}{dt} \left(\frac{dU}{dm} \right) = \frac{d}{dt} \left(\frac{dU}{\rho dv} \right)$$

SAR is expressed in units of Watts per Kilogram (W/kg).

$$SAR = \frac{\sigma \cdot E^2}{\rho}$$

where:

σ	=	conductivity of the tissue-simulating material (S/m)
ρ	=	mass density of the tissue-simulating material (kg/m ³)
E	=	Total RMS electric field strength (V/m)

NOTE: The primary factors that control rate of energy absorption were found to be the wavelength of the incident field in relation to the dimensions and geometry of the irradiated organism, the orientation of the organism in relation to the polarity of field vectors, the presence of reflecting surfaces, and whether conductive contact is made by the organism with a ground plane.[6]

2.2 SAR Measurement Procedure

The evaluation was performed using the following procedure compliant to FCC KDB Publication 865664 D01v01r04 and IEEE 1528-2013:

1. The SAR distribution at the exposed side of the head or body was measured at a distance no greater than 5.0 mm from the inner surface of the shell. The area covered the entire dimension of the device-head and body interface and the horizontal grid resolution was determined per FCC KDB Publication 865664 D01v01r04 (See Table 2-1) and IEEE 1528-2013.
2. The point SAR measurement was taken at the maximum SAR region determined from Step 1 to enable the monitoring of SAR fluctuations/drifts during the 1g/10g cube evaluation. SAR at this fixed point was measured and used as a reference value.
3. Based on the area scan data, the peak of the region with maximum SAR was determined by spline interpolation. Around this point, a volume was assessed according to the measurement resolution and volume size requirements of FCC KDB Publication 865664 D01v01r04 (See Table 2-1) and IEEE 1528-2013. On the

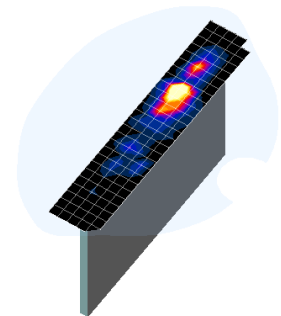


Figure 2-1
Sample SAR Area Scan

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	Page 5 of 12

basis of this data set, the spatial peak SAR value was evaluated with the following procedure (see references or the DASY manual online for more details):

- a. SAR values at the inner surface of the phantom are extrapolated from the measured values along the line away from the surface with spacing no greater than that in Table 2-1. The extrapolation was based on a least-squares algorithm. A polynomial of the fourth order was calculated through the points in the z-axis (normal to the phantom shell).
- b. After the maximum interpolated values were calculated between the points in the cube, the SAR was averaged over the spatial volume (1g or 10g) using a 3D-Spline interpolation algorithm. The 3D-spline is composed of three one-dimensional splines with the “Not a knot” condition (in x, y, and z directions). The volume was then integrated with the trapezoidal algorithm. One thousand points (10 x 10 x 10) were obtained through interpolation, in order to calculate the averaged SAR.
- c. All neighboring volumes were evaluated until no neighboring volume with a higher average value was found.

4. The SAR reference value, at the same location as step 2, was re-measured after the zoom scan was complete to calculate the SAR drift. If the drift deviated by more than 5%, the SAR test and drift measurements were repeated.

Table 2-1
Area and Zoom Scan Resolutions per FCC KDB Publication 865664 D01v01r04*

Frequency	Maximum Area Scan Resolution (mm) ($\Delta x_{\text{area}}, \Delta y_{\text{area}}$)	Maximum Zoom Scan Resolution (mm) ($\Delta x_{\text{zoom}}, \Delta y_{\text{zoom}}$)	Maximum Zoom Scan Spatial Resolution (mm)			Minimum Zoom Scan Volume (mm) (x,y,z)
			Uniform Grid	Graded Grid		
				$\Delta z_{\text{zoom}}(n)$	$\Delta z_{\text{zoom}}(1)^*$	
≤ 2 GHz	≤ 15	≤ 8	≤ 5	≤ 4	≤ 1.5* $\Delta z_{\text{zoom}}(n-1)$	≥ 30
2-3 GHz	≤ 12	≤ 5	≤ 5	≤ 4	≤ 1.5* $\Delta z_{\text{zoom}}(n-1)$	≥ 30
3-4 GHz	≤ 12	≤ 5	≤ 4	≤ 3	≤ 1.5* $\Delta z_{\text{zoom}}(n-1)$	≥ 28
4-5 GHz	≤ 10	≤ 4	≤ 3	≤ 2.5	≤ 1.5* $\Delta z_{\text{zoom}}(n-1)$	≥ 25
5-6 GHz	≤ 10	≤ 4	≤ 2	≤ 2	≤ 1.5* $\Delta z_{\text{zoom}}(n-1)$	≥ 22

*Also compliant to IEEE 1528-2013 Table 6

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	Page 6 of 12

REV 1.1
04/08/2022

3 SAR CHARACTERIZATION

3.1 DSI and SAR Determination

This device uses different Device State Index (DSI) to configure different time averaged power levels based on certain exposure scenarios. Depending on the detection scheme implemented in the smartphone, the worst-case SAR was determined by measurements for the relevant exposure conditions for that DSI. Detailed descriptions of the detection mechanisms are included in the operational description.

When 1g SAR and 10g SAR exposure comparison is needed, the worst-case was determined from SAR normalized to 1g or 10g SAR limit.

The device state index (DSI) conditions used in Table 3-1 represent different exposure scenarios.

Table 3-1
DSI and Corresponding Exposure Scenarios

Scenario	Description	SAR Test Cases
Head (DSI = 1)	- Device positioned next to head - Receiver Active	Head SAR per KDB Publication 648474 D04
Hotspot mode (DSI = 0)	- Device transmits in hotspot mode near body - Hotspot Mode Active	Hotspot SAR per KDB Publication 941225 D06
Phablet (DSI = 0)	Device is held with hand.	Phablet SAR per KDB Publication 648474 D04 & KDB Publication 616217 D04
Body-worn (DSI = 0)	Device being used with a body-worn accessory	Body-worn SAR per KDB Publication 648474 D04

3.2 SAR Design Target

SAR_design_target is determined by ensuring that it is less than FCC SAR limit after accounting for total device designed related uncertainties specified by the manufacturer (see Table 3-2).

Table 3-2
***SAR_design_target* Calculations**

<i>SAR_design_target</i>			
$SAR_design_target < SAR_regulatory_limit \times 10^{\frac{-Total\ Uncertainty}{10}}$			
1g SAR (W/kg)		10g SAR (W/kg)	
<i>Total Uncertainty</i>	1.0 dB	<i>Total Uncertainty</i>	1.0 dB
<i>SAR_regulatory_limit</i>	1.6 W/kg	<i>SAR_regulatory_limit</i>	4.0 W/kg
<i>SAR_design_target</i>	1.0 W/kg	<i>SAR_design_target</i>	2.5 W/kg

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	Page 7 of 12

REV 1.1
04/08/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact CT.Info@Element.com.

3.3 SAR Char

SAR test results corresponding to P_{max} for each antenna/technology/band/DSI can be found in Appendix A.

P_{limit} is calculated by linearly scaling with the measured SAR at the Ppart0 to correspond to the SAR_{design_target} . When $P_{limit} < P_{max}$, P_{part0} was used as P_{limit} in the Smart Transmit EFS. When $P_{limit} > P_{max}$ and $P_{part0}=P_{max}$, calculated P_{limit} was used in the Smart Transmit EFS. All reported SAR obtained from the Ppart0 SAR tests was less than $SAR_{Design_target}+ 1$ dB Uncertainty. The final P_{limit} determination for each exposure scenario corresponding to SAR_{design_target} are shown in Table 3-3.

Table 3-3
 P_{Limit} Determination

Device State Index (DSI)	P_{Limit} Determination Scenarios
0	The worst-case SAR exposure is determined as maximum SAR normalized to the limit (i.e. lowest P_{limit}) among: 1. Body Worn SAR 2. Extremity SAR measured at 0 mm spacing for back, front, top, bottom, right and left. 3. Hotspot SAR at 5 and 10 mm
1	P_{limit} is calculated based on 1g Head SAR

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	Page 8 of 12

REV 1.1
04/08/2022

Table 3-4
SAR Characterizations

Exposure Scenario		Maximum Time-Up Output Power*	Body-worn, Hotspot, or Pucklet	Head
Averaging Volume			1g/10g 10mm, 5mm, 0mm	1g
Specifying DSI			0mm	0mm
Technology/Band	Antenna	Group	P _{max}	P _{max}
GSM 850	A	AG0	25.3	27.9
GSM 850	E	AG1	25.3	20.8
GSM 1900	A	AG0	22.1	17.8
UMTS 850	A	AG0	24.0	25.1
UMTS 850	E	AG1	24.0	21.0
UMTS 1750	A	AG0	23.0	16.0
UMTS 1900	A	AG0	23.0	17.0
LTE Band 71	A	AG0	24.0	26.3
LTE Band 71	E	AG1	24.0	22.0
LTE Band 12	A	AG0	24.0	26.1
LTE Band 12	E	AG1	24.0	22.0
LTE Band 13	A	AG0	24.0	24.5
LTE Band 13	E	AG1	24.0	21.0
LTE Band 14	A	AG0	24.0	24.3
LTE Band 14	E	AG1	24.0	21.0
LTE Band 205	A	AG0	24.0	26.2
LTE Band 205	E	AG1	24.0	21.0
LTE Band 664	A	AG0	23.5	17.0
LTE Band 664	F	AG1	23.5	20.0
LTE Band 252	A	AG0	23.5	17.0
LTE Band 252	F	AG1	23.5	20.0
LTE Band 30	A	AG0	22.0	19.0
LTE Band 30	F	AG1	22.0	19.0
LTE Band 7	B	AG0	23.0	16.0
LTE Band 7	F	AG1	23.0	16.5
LTE Band 41/38	B	AG0	22.0	17.0
LTE Band 41/38	F	AG1	22.0	16.0
LTE Band 48	F	AG1	20.0	17.5
NR Band n71	A	AG0	24.0	26.1
NR Band n71	E	AG1	24.0	22.0
NR Band n12	A	AG0	24.0	26.1
NR Band n12	E	AG1	24.0	22.0
NR Band n14	A	AG0	24.0	26.3
NR Band n14	E	AG1	24.0	21.0
NR Band n20/n5	A	AG0	24.0	25.8
NR Band n20/n5	E	AG1	24.0	21.0
NR Band n70	A	AG0	23.5	17.5
NR Band n70	F	AG1	23.5	20.0
NR Band n66	A	AG0	23.5	17.0
NR Band n66	F	AG1	23.5	20.0
NR Band n20/n2	A	AG0	23.5	17.0
NR Band n20/n2	F	AG1	23.5	20.0
NR Band n30	A	AG0	22.0	19.0
NR Band n30	F	AG1	22.0	19.0
NR Band n7	B	AG0	23.0	16.0
NR Band n7	F	AG1	23.0	16.5
NR Band n41 PC2 (Path 1)	F	AG1	26.3	16.5
NR Band n41 PC2 (Path 1)	B	AG0	22.0	17.0
NR Band n41 PC2 (Path 1)	E	AG1	24.5	15.5
NR Band n41 PC2 (Path 1)	D	AG0	21.0	15.5
NR Band n41 PC2 (Path 1)	B	AG0	26.0	17.0
NR Band n41 PC2 (Path 2)	F	AG1	21.0	16.5
NR Band n41 PC2 (Path 2)	D	AG0	24.5	15.5
NR Band n41 PC2 (Path 2)	E	AG1	21.5	15.5
NR Band n41 PC2 (Path 2)	D	AG0	26.0	17.0
NR Band n41 PC1.5 UL-MIMO	F	AG1	26.0	17.0
NR Band n41 PC1.5	E	AG1	24.5	15.5
NR Band n41 PC1.5	D	AG0	24.5	15.5
NR Band n38 (Path 1)	F	AG1	24.0	16.5
NR Band n38 (Path 2)	B	AG0	24.0	17.0
NR Band n48	F	AG1	22.0	17.0
NR Band n48	C	AG0	17.5	12.5
NR Band n48	H	AG1	21.5	17.0
NR Band n48	D	AG0	17.0	12.5
NR Band n78 PC2	F	AG1	26.3	16.5
NR Band n78 PC2	C	AG0	21.5	11.5
NR Band n78 PC2	H	AG1	25.0	16.5
NR Band n78 PC2	D	AG0	21.0	11.5
NR Band n77 PC2	F	AG1	26.3	16.5
NR Band n77 PC2	C	AG0	21.5	11.5
NR Band n77 PC2	H	AG1	25.0	16.5
NR Band n77 PC2	D	AG0	21.0	11.5
NR Band n77 PC1.5 UL-MIMO	F	AG1	26.3	16.5
NR Band n77 PC1.5 UL-MIMO	C	AG0	26.0	16.5
NR Band n77 PC1.5	H	AG1	25.0	16.5
NR Band n77 PC1.5	D	AG0	25.0	16.0
5 GHz WIFIFI	G	AG1	17.0	13.0
5 GHz WIFIFI	E	AG1	17.0	13.0
5 GHz WIFIFI	MIMO	AG1	17.0	13.0
6 GHz WIFIFI	G	AG1	16.0	11.0
6 GHz WIFIFI	E	AG1	16.0	11.0
6 GHz WIFIFI	MIMO	AG1	16.0	11.0

Notes:

- When $P_{max} < P_{limit}$ EFS, the DUT will operate at a power level up to P_{max}
- All P_{limit} EFS and maximum tune-up output power P_{max} levels entered in above Table correspond to average power levels after accounting for duty cycle in the case of GMSK, TDD, or OFDM modulation schemes (e.g. GSM, LTE TDD, WLAN, BT, NTN).
- Maximum tune-up output power P_{max} is used to configure EUT during RF tune up procedure. The maximum allowed output power is equal to maximum tune-up output power + 1dB device design uncertainty.
- WLAN MIMO P_{max} and P_{limit} are defined per antenna chain.
- Based on Qualcomm guidance, for multi_tx_factor > 1.0, the reported SAR for each tech/band/ant/DSI is scaled using $\min\{P_{limit} * \text{multi_tx_factor} * 10^{(\text{sub6 device uncertainty}/10)}, P_{max}\}$ in simultaneous transmission evaluations. For this device, the manufacturer declared a multi_tx_factor of 1.27.

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	Page 9 of 12

4

EQUIPMENT LIST

For SAR measurements

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
Agilent	8594A	(9kHz-2.9GHz) Spectrum Analyzer	CBT	N/A	CBT	3051A00187
Agilent	N5182A	MXG Vector Signal Generator	5/30/2025	Annual	5/30/2026	MY48180366
Agilent	N5182A	MXG Vector Signal Generator	8/1/2025	Annual	8/1/2026	MY47420651
Agilent	8753ES	S-Parameter Vector Network Analyzer	1/6/2025	Annual	1/6/2026	MY40001472
Agilent	N4010A	Wireless Connectivity Test Set	N/A	N/A	N/A	GB46170464
Amplifier Research	1551G6	Amplifier	CBT	N/A	CBT	433974
Anritsu	MN8110B	I/O Adaptor	CBT	N/A	CBT	6261747881
Rohde & Schwarz	NRP2	Power Meter	5/23/2025	Annual	5/23/2026	103084
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	6/9/2025	Annual	6/9/2026	6201144418
Anritsu	MT8821C	Radio Communication Analyzer MT8821C	3/14/2025	Annual	3/14/2026	6201381794
Anritsu	MT8000A	Radio Communication Test Station	6/4/2025	Annual	6/4/2026	6261914237
Anritsu	MT8000A	Radio Communication Test Station	11/12/2024	Annual	11/12/2025	6272337405
Anritsu	MA24106A	USB Power Sensor	5/29/2025	Annual	5/29/2026	1344554
Anritsu	MA24106A	USB Power Sensor	6/26/2025	Annual	6/26/2026	1827529
Control Company	4052	Long Stem Thermometer	2/27/2024	Biennial	2/27/2026	240174346
Control Company	4052	Long Stem Thermometer	2/27/2024	Biennial	2/27/2026	240171096
Control Company	4052	Long Stem Thermometer	2/27/2024	Biennial	2/27/2026	240171059
Control Company	4040	Therm./ Clock/ Humidity Monitor	4/15/2024	Biennial	4/15/2026	240310280
Control Company	4040	Therm./ Clock/ Humidity Monitor	10/15/2024	Biennial	10/15/2026	240763503
Testo	ALARM-HYGROMETER	ALARM-HYGROMETER	7/3/2025	Annual	7/3/2026	83316952
Testo	ALARM-HYGROMETER	ALARM-HYGROMETER	7/3/2025	Annual	7/3/2026	83316953
Testo	ALARM-HYGROMETER	ALARM-HYGROMETER	7/3/2025	Annual	7/3/2026	83316970
Keysight Technologies	N9020A	MXA Signal Analyzer	7/7/2025	Annual	7/7/2026	MY48010233
MCL	BW-N6W5+	6dB Attenuator	CBT	N/A	CBT	1139
MCL	BW-N3W5+	3dB Attenuator	CBT	N/A	CBT	2028
Mini-Circuits	VLF-6000+	Low Pass Filter DC to 6000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	VLF-6000+	Low Pass Filter DC to 6000 MHz	CBT	N/A	CBT	31634
Mini-Circuits	BW-N20W5+	DC to 18 GHz Precision Fixed 20 dB Attenuator	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-1200+	Low Pass Filter DC to 1000 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	NLP-2950+	Low Pass Filter DC to 2700 MHz	CBT	N/A	CBT	N/A
Mini-Circuits	BW-N20W5	Power Attenuator	CBT	N/A	CBT	1226
Mini-Circuits	ZUDC10-83-S+	Directional Coupler	CBT	N/A	CBT	2050
Narda	4772-3	Attenuator (3dB)	CBT	N/A	CBT	9406
Narda	BW-S3W2	Attenuator (3dB)	CBT	N/A	CBT	120
Seekonk	NC-100	Torque Wrench	4/2/2024	Biennial	4/2/2026	1262
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	1/10/2025	Annual	1/10/2026	131453
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	8/27/2024	Biennial	8/27/2026	167085
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	12/10/2024	Annual	12/10/2025	167286
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	1/6/2025	Annual	1/6/2026	131454
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	7/9/2025	Annual	7/9/2026	166462
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	2/22/2025	Annual	2/22/2026	168527
Rohde & Schwarz	CMW500	Wideband Radio Communication Tester	1/6/2025	Annual	1/6/2026	150117
SPEAG	DAK-3.5	Dielectric Assessment Kit	11/5/2024	Annual	11/5/2025	1277
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1237
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1331
SPEAG	MAIA	Modulation and Audio Interference Analyzer	N/A	N/A	N/A	1390
SPEAG	DAK-12	Dielectric Assessment Kit (4MHz - 3GHz)	3/10/2025	Annual	3/10/2026	1102
SPEAG	DAK-12	Dielectric Assessment Kit (4MHz - 3GHz)	7/14/2025	Annual	7/14/2026	1039

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	Page 10 of 12

REV 1.1
04/08/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact CT.Info@Element.com.

Manufacturer	Model	Description	Cal Date	Cal Interval	Cal Due	Serial Number
SPEAG	CLA-13	Confined Loop Antenna	9/4/2024	Annual	9/4/2025	1002
SPEAG	D750V3	750 MHz SAR Dipole	10/7/2024	Annual	10/7/2025	1161
SPEAG	D750V3	750 MHz SAR Dipole	3/4/2025	Annual	3/4/2026	1054
SPEAG	D835V2	835 MHz SAR Dipole	3/4/2025	Annual	3/4/2026	4d047
SPEAG	D835V2	835 MHz SAR Dipole	3/11/2024	Biennial	3/11/2026	4d133
SPEAG	D1640V2	1640 MHz SAR Dipole	12/13/2022	Triennial	10/6/2025	321
SPEAG	D1750V2	1750 MHz SAR Dipole	1/13/2025	Annual	1/13/2026	1148
SPEAG	D1750V2	1750 MHz SAR Dipole	11/7/2024	Annual	11/7/2025	1150
SPEAG	D1900V2	1900 MHz SAR Dipole	2/7/2025	Annual	2/7/2026	5d148
SPEAG	D1900V2	1900 MHz SAR Dipole	8/7/2025	Annual	8/7/2026	5d080
SPEAG	D2300V2	2300 MHz SAR Dipole	6/3/2025	Annual	6/3/2026	1117
SPEAG	D2300V2	2300 MHz SAR Dipole	8/12/2025	Annual	8/12/2026	1073
SPEAG	D2300V2	2300 MHz SAR Dipole	2/12/2025	Annual	2/12/2026	1008
SPEAG	D2450V2	2450 MHz SAR Dipole	11/15/2022	Triennial	11/15/2025	797
SPEAG	D2450V2	2450 MHz SAR Dipole	2/12/2025	Annual	2/12/2026	882
SPEAG	D2450V2	2450 MHz SAR Dipole	6/3/2025	Annual	6/3/2026	945
SPEAG	D2600V2	2600 MHz SAR Dipole	6/3/2025	Annual	6/3/2026	1009
SPEAG	D2600V2	2600 MHz SAR Dipole	6/6/2025	Annual	6/6/2026	1064
SPEAG	D3500V2	3500 MHz SAR Dipole	12/11/2024	Annual	12/11/2025	1068
SPEAG	D3500V2	3500 MHz SAR Dipole	6/2/2025	Annual	6/2/2026	1127
SPEAG	D3500V2	3500 MHz SAR Dipole	1/10/2023	Triennial	1/10/2026	1097
SPEAG	D3700V2	3700 MHz SAR Dipole	1/13/2023	Triennial	1/13/2026	1067
SPEAG	D3700V2	3700 MHz SAR Dipole	12/11/2024	Annual	12/11/2025	1029
SPEAG	D3700V2	3700 MHz SAR Dipole	6/2/2025	Annual	6/2/2026	1096
SPEAG	D3900V2	3900 MHz SAR Dipole	6/10/2024	Biennial	6/10/2026	1073
SPEAG	D3900V2	3900 MHz SAR Dipole	10/19/2023	Biennial	10/19/2025	1056
SPEAG	D5GHzV2	5 GHz SAR Dipole	6/2/2025	Annual	6/2/2026	1237
SPEAG	D6.5GHzV2	6.5 GHz SAR Dipole	12/6/2024	Annual	12/6/2025	1018
SPEAG	D8GHzV2	8GHz SAR Dipole	3/6/2025	Annual	3/6/2026	1007
SPEAG	5G Verification Source 10GHz	10GHz System Verification Antenna	3/4/2025	Annual	3/4/2026	1002
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/13/2025	Annual	1/13/2026	1530
SPEAG	DAE4	Dasy Data Acquisition Electronics	3/11/2025	Annual	3/11/2026	1415
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/4/2025	Annual	6/4/2026	1652
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/5/2025	Annual	6/5/2026	1558
SPEAG	DAE4	Dasy Data Acquisition Electronics	2/11/2025	Annual	2/11/2026	1645
SPEAG	DAE4	Dasy Data Acquisition Electronics	5/9/2025	Annual	5/9/2026	1678
SPEAG	DAE4	Dasy Data Acquisition Electronics	1/14/2025	Annual	1/14/2026	1466
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/10/2025	Annual	4/10/2026	1272
SPEAG	DAE4	Dasy Data Acquisition Electronics	12/4/2024	Annual	12/4/2025	1213
SPEAG	DAE4	Dasy Data Acquisition Electronics	6/4/2025	Annual	6/4/2026	1502
SPEAG	DAE4	Dasy Data Acquisition Electronics	4/7/2025	Annual	4/7/2026	1407
SPEAG	DAE4ip	Dasy Data Acquisition Electronics	2/7/2025	Annual	2/7/2026	1638
SPEAG	DAE4ip	Dasy Data Acquisition Electronics	2/5/2025	Annual	2/5/2026	1639
SPEAG	EX3DV4	SAR Probe	4/7/2025	Annual	4/7/2026	7659
SPEAG	EX3DV4	SAR Probe	4/8/2025	Annual	4/8/2026	7718
SPEAG	EX3DV4	SAR Probe	11/11/2024	Annual	11/11/2025	7539
SPEAG	EX3DV4	SAR Probe	1/9/2025	Annual	1/9/2026	7565
SPEAG	EX3DV4	SAR Probe	3/7/2025	Annual	3/7/2026	7488
SPEAG	EX3DV4	SAR Probe	5/9/2025	Annual	5/9/2026	7660
SPEAG	EX3DV4	SAR Probe	6/12/2025	Annual	6/12/2026	7637
SPEAG	EX3DV4	SAR Probe	5/13/2025	Annual	5/13/2026	3914
SPEAG	EX3DV4	SAR Probe	6/12/2025	Annual	6/12/2026	7402
SPEAG	EX3DV4	SAR Probe	6/11/2025	Annual	6/11/2026	7661
SPEAG	EX3DV4	SAR Probe	1/7/2025	Annual	1/7/2026	7713
SPEAG	EX3DV4	SAR Probe	2/10/2025	Annual	2/10/2026	7570
SPEAG	EX3DV4	SAR Probe	12/5/2024	Annual	12/5/2025	7410
SPEAG	EX3DV4	SAR Probe	2/12/2025	Annual	2/12/2026	7640
SPEAG	EUMmVV3	EUMmVV3 Probe	1/8/2025	Annual	1/8/2026	9389

Note:

1. CBT (Calibrated Before Testing). Prior to testing, the measurement paths containing a cable, amplifier, attenuator, coupler or filter were connected to a calibrated source (i.e. a signal generator) to determine the losses of the measurement path. The power meter offset was then adjusted to compensate for the measurement system losses. This level offset is stored within the power meter before measurements are made. This calibration verification procedure applies to the system verification and output power measurements. The calibrated reading is then taken directly from the power meter after compensation of the losses for all final power measurements.
2. Each equipment item was used solely within its respective calibration period.

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	Page 11 of 12

REV 1.1
04/08/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact CT.Info@Element.com.

5

MEASUREMENT UNCERTAINTIES

SAR Uncertainty Budget based on IEEE 1528-2013 (0.3 GHz to 10 GHz)

a	b	c	d	e f(d,k)	f	g	h cxf/e	i cxg/e	k
Uncertainty component	Reference	Tol. (± %)	Prob. dist.	Dvi.	ci (1g)	ci (10g)	1g ui (± %)	10g ui (± %)	vi
Measurement system									
Probe calibration	E.2.1	9.30	N	1	1	1	9.30	9.30	∞
Axial isotropy	E.2.2	0.25	N	1	0.707	0.707	0.18	0.18	∞
Hemispherical isotropy	E.2.2	1.30	N	1	0.707	0.707	0.92	0.92	∞
Boundary effect	E.2.3	2.00	R	1.73	1	1	1.15	1.15	∞
Linearity	E.2.4	0.30	R	1.73	1	1	0.17	0.17	∞
System detection limits	E.2.4	0.25	R	1.73	1	1	0.14	0.14	∞
Modulation response	E.2.5	4.80	R	1.73	1	1	2.77	2.77	∞
Readout electronics	E.2.6	0.30	N	1	1	1	0.30	0.30	∞
Response time	E.2.7	1.01	R	1.73	1	1	0.58	0.58	∞
Integration time	E.2.8	2.60	R	1.73	1	1	1.50	1.50	∞
RF ambient conditions - noise	E.6.1	3.00	R	1.73	1	1	1.73	1.73	∞
RF ambient conditions - reflections	E.6.1	3.00	R	1.73	1	1	1.73	1.73	∞
Probe positioner mechanical tolerance	E.6.2	0.04	R	1.73	1	1	0.02	0.02	∞
Probe positioning with respect to phantom shell	E.6.3	0.80	R	1.73	1	1	0.46	0.46	∞
Extrapolation, interpolation, and integration algorithms for max. SAR evaluation	E.5	4.00	R	1.73	1	1	2.31	2.31	∞
Test sample related									
Test sample positioning	E.4.2	3.12	N	1	1	1	3.12	3.12	35
Device holder uncertainty	E.4.1	1.67	N	1	1	1	1.67	1.67	5
Output power variation - SAR drift	E.2.9	5.00	R	1.73	1	1	2.89	2.89	∞
SAR scaling	E.6.5	0.00	R	1.73	1	1	0.00	0.00	∞
Phantom and tissue parameters									
Phantom shell uncertainty - shape, thickness and permittivity	E.3.1	7.60	R	1.73	1	1	4.39	4.39	∞
Uncertainty in SAR correction for deviations in permittivity and conductivity	E.3.2	0.00	N	1	1	1	0.00	0.00	∞
Liquid conductivity measurement	E.3.3	4.27	N	1	0.78	0.71	3.33	3.03	55
Liquid permittivity measurement	E.3.3	4.18	N	1	0.23	0.26	0.96	1.09	55
Liquid conductivity - temperature uncertainty	E.3.4	3.40	R	1.73	0.78	0.71	1.53	1.39	∞
Liquid permittivity - temperature uncertainty	E.3.4	0.60	R	1.73	0.23	0.26	0.08	0.09	∞
Liquid Conductivity - deviation from target values	E.3.2	5.00	R	1.73	0.64	0.43	1.85	1.24	∞
Liquid Permittivity - deviation from target values	E.3.2	5.00	R	1.73	0.60	0.49	1.73	1.41	∞
Combined standard uncertainty							13.1	12.9	150
Expanded uncertainty (95% confidence interval)							26.2	25.8	

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	Page 12 of 12

REV 1.1
04/08/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact CT.Info@Element.com.

APPENDIX A: SAR TEST RESULTS FOR P_{Limit} CALCULATIONS

For some bands/modes, a lower P_{Limit} was selected as a more conservative evaluation.

Table A-1
DSI = 0 P_{Limit} Calculations – GPRS Phablet SAR

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	GPRS 850	GPRS 3 Tx Slots	A	0536M	1:2.76	0.03	836.60	190	29.25	Back	0	0.609	30.9	27.9	27.9
Phablet	GPRS 850	GPRS 3 Tx Slots	A	0536M	1:2.76	0.01	836.60	190	29.25	Front	0	0.661	30.5		
Phablet	GPRS 850	GPRS 3 Tx Slots	A	0536M	1:2.76	0.08	836.60	190	29.25	Bottom	0	0.971	28.9		
Phablet	GPRS 850	GPRS 3 Tx Slots	A	0536M	1:2.76	-0.06	836.60	190	29.25	Right	0	1.230	27.9		
Phablet	GPRS 850	GPRS 3 Tx Slots	A	0536M	1:2.76	-0.02	836.60	190	29.25	Left	0	0.122	37.9		
Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	GPRS 850	GPRS 4 Tx Slots	E	0536M	1:2.076	-0.09	836.60	190	23.98	Back	0	0.268	30.4	27.0	20.8
Phablet	GPRS 850	GPRS 4 Tx Slots	E	0536M	1:2.076	0.06	836.60	190	23.98	Front	0	0.502	27.7		
Phablet	GPRS 850	GPRS 4 Tx Slots	E	0536M	1:2.076	-0.02	836.60	190	23.98	Top	0	0.522	27.6		
Phablet	GPRS 850	GPRS 4 Tx Slots	E	0536M	1:2.076	-0.13	836.60	190	23.98	Right	0	0.598	27.0		
Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	GPRS 1900	GPRS 4 Tx Slots	A	0531M	1:2.076	0.00	1880.00	661	20.58	Back	0	0.658	23.1	22.9	17.8
Phablet	GPRS 1900	GPRS 4 Tx Slots	A	0531M	1:2.076	-0.07	1880.00	661	20.58	Front	0	0.702	22.9		
Phablet	GPRS 1900	GPRS 4 Tx Slots	A	0531M	1:2.076	-0.08	1880.00	661	20.58	Bottom	0	0.696	22.9		
Phablet	GPRS 1900	GPRS 4 Tx Slots	A	0531M	1:2.076	-0.09	1880.00	661	20.58	Right	0	0.091	31.7		
Phablet	GPRS 1900	GPRS 4 Tx Slots	A	0531M	1:2.076	0.21	1880.00	661	20.58	Left	0	0.098	31.4		

Table A-2
DSI = 0 P_{Limit} Calculations – UMTS Phablet SAR

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	UMTS 850	RMC	A	0536M	1:1	0.00	846.60	4233	23.70	Back	0	1.040	27.5	25.1	25.1
Phablet	UMTS 850	RMC	A	0536M	1:1	0.03	846.60	4233	23.70	Front	0	0.983	27.7		
Phablet	UMTS 850	RMC	A	0536M	1:1	-0.01	846.60	4233	23.70	Bottom	0	1.150	27.0		
Phablet	UMTS 850	RMC	A	0536M	1:1	-0.04	846.60	4233	23.70	Right	0	1.800	25.1		
Phablet	UMTS 850	RMC	A	0536M	1:1	-0.09	846.60	4233	23.70	Left	0	0.164	35.5		
Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	UMTS 850	RMC	E	0536M	1:1	0.06	836.60	4183	20.94	Back	0	0.508	27.8	26.2	21.0
Phablet	UMTS 850	RMC	E	0536M	1:1	0.00	836.60	4183	20.94	Front	0	0.607	27.0		
Phablet	UMTS 850	RMC	E	0536M	1:1	-0.01	836.60	4183	20.94	Top	0	0.616	27.0		
Phablet	UMTS 850	RMC	E	0536M	1:1	-0.01	836.60	4183	20.94	Right	0	0.728	26.2		
Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	UMTS 1750	RMC	A	0708M	1:1	0.09	1752.60	1513	15.95	Back	0	0.610	22.0	21.6	16.0
Phablet	UMTS 1750	RMC	A	0708M	1:1	0.01	1752.60	1513	15.95	Front	0	0.672	21.6		
Phablet	UMTS 1750	RMC	A	0708M	1:1	-0.01	1752.60	1513	15.95	Bottom	0	0.609	22.0		
Phablet	UMTS 1750	RMC	A	0708M	1:1	-0.03	1752.60	1513	15.95	Right	0	0.089	30.4		
Phablet	UMTS 1750	RMC	A	0708M	1:1	-0.01	1752.60	1513	15.95	Left	0	0.061	32.0		
Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	UMTS 1900	RMC	A	0708M	1:1	0.09	1852.40	9262	16.64	Back	0	0.829	21.4	21.1	17.0
Phablet	UMTS 1900	RMC	A	0708M	1:1	0.08	1852.40	9262	16.64	Front	0	0.829	21.4		
Phablet	UMTS 1900	RMC	A	0708M	1:1	-0.01	1852.40	9262	16.64	Bottom	0	0.887	21.1		
Phablet	UMTS 1900	RMC	A	0708M	1:1	-0.03	1852.40	9262	16.64	Right	0	0.119	29.8		
Phablet	UMTS 1900	RMC	A	0708M	1:1	-0.01	1852.40	9262	16.64	Left	0	0.094	30.8		

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	APPENDIX A: Page 1 of 9

REV 1.1
04/08/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact CT.Info@Element.com.

Table A-3
DSI = 0 P_{Limit} Calculations – LTE Band 71 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 71	20	QPSK	A	0531M	1:1	-0.06	680.50	133297	0.0	23.88	1	0	Back	0	0.897	28.1	26.3	26.3
Phablet	LTE Band 71	20	QPSK	A	0531M	1:1	-0.04	680.50	133297	0.0	23.88	1	0	Front	0	0.816	28.7		
Phablet	LTE Band 71	20	QPSK	A	0531M	1:1	0.02	680.50	133297	0.0	23.88	1	0	Bottom	0	0.666	29.6		
Phablet	LTE Band 71	20	QPSK	A	0531M	1:1	-0.08	680.50	133297	0.0	23.88	1	0	Right	0	1.410	26.3		
Phablet	LTE Band 71	20	QPSK	A	0531M	1:1	-0.10	680.50	133297	0.0	23.88	1	0	Left	0	0.100	37.8		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 71	20	QPSK	E	0531M	1:1	0.02	680.50	133297	0.0	21.66	1	50	Back	0	0.505	28.6	27.5	22.0
Phablet	LTE Band 71	20	QPSK	E	0531M	1:1	-0.04	680.50	133297	0.0	21.66	1	50	Front	0	0.526	27.6		
Phablet	LTE Band 71	20	QPSK	E	0531M	1:1	0.07	680.50	133297	0.0	21.66	1	50	Top	0	0.645	27.5		
Phablet	LTE Band 71	20	QPSK	E	0531M	1:1	0.11	680.50	133297	0.0	21.66	1	50	Right	0	0.572	28.0		

Table A-4
DSI = 0 P_{Limit} Calculations – LTE Band 12 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 12	10	QPSK	A	0531M	1:1	-0.04	707.50	23095	0.0	23.62	1	25	Back	0	0.668	29.3	27.2	26.1
Phablet	LTE Band 12	10	QPSK	A	0531M	1:1	-0.09	707.50	23095	0.0	23.62	1	25	Front	0	0.703	29.1		
Phablet	LTE Band 12	10	QPSK	A	0531M	1:1	0.16	707.50	23095	0.0	23.62	1	25	Bottom	0	0.523	30.4		
Phablet	LTE Band 12	10	QPSK	A	0531M	1:1	-0.16	707.50	23095	0.0	23.62	1	25	Right	0	1.080	27.2		
Phablet	LTE Band 12	10	QPSK	A	0531M	1:1	-0.17	707.50	23095	0.0	23.62	1	25	Left	0	0.123	36.7		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 12	10	QPSK	E	0531M	1:1	-0.01	707.50	23095	0.0	21.66	1	25	Back	0	0.558	28.1	27.3	22.0
Phablet	LTE Band 12	10	QPSK	E	0531M	1:1	-0.02	707.50	23095	0.0	21.66	1	25	Front	0	0.524	28.4		
Phablet	LTE Band 12	10	QPSK	E	0531M	1:1	-0.05	707.50	23095	0.0	21.66	1	25	Top	0	0.676	27.3		
Phablet	LTE Band 12	10	QPSK	E	0531M	1:1	-0.10	707.50	23095	0.0	21.66	1	25	Right	0	0.522	28.4		

Table A-5
DSI = 0 P_{Limit} Calculations – LTE Band 13 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 13	10	QPSK	A	0531M	1:1	-0.02	782.00	23230	0.0	23.78	1	0	Back	0	1.030	27.6	27.6	24.5
Phablet	LTE Band 13	10	QPSK	A	0531M	1:1	0.01	782.00	23230	0.0	23.78	1	0	Front	0	0.959	27.9		
Phablet	LTE Band 13	10	QPSK	A	0531M	1:1	0.00	782.00	23230	0.0	23.78	1	0	Bottom	0	0.786	28.8		
Phablet	LTE Band 13	10	QPSK	A	0531M	1:1	0.20	782.00	23230	0.0	23.78	1	0	Right	0	0.898	28.2		
Phablet	LTE Band 13	10	QPSK	A	0531M	1:1	0.20	782.00	23230	0.0	23.78	1	0	Left	0	0.160	35.7		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 13	10	QPSK	E	0531M	1:1	0.00	782.00	23230	0.0	20.63	1	0	Back	0	0.515	27.4	26.6	21.0
Phablet	LTE Band 13	10	QPSK	E	0531M	1:1	0.02	782.00	23230	0.0	20.63	1	0	Front	0	0.578	26.9		
Phablet	LTE Band 13	10	QPSK	E	0531M	1:1	0.02	782.00	23230	0.0	20.63	1	0	Top	0	0.626	26.6		
Phablet	LTE Band 13	10	QPSK	E	0531M	1:1	0.02	782.00	23230	0.0	20.63	1	0	Right	0	0.576	27.0		

Table A-6
DSI = 0 P_{Limit} Calculations – LTE Band 14 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 14	10	QPSK	A	0531M	1:1	-0.05	793.00	23330	0.0	23.38	1	25	Back	0	0.983	27.4	27.4	24.3
Phablet	LTE Band 14	10	QPSK	A	0531M	1:1	0.03	793.00	23330	0.0	23.38	1	25	Front	0	0.919	27.7		
Phablet	LTE Band 14	10	QPSK	A	0531M	1:1	-0.03	793.00	23330	1.0	22.39	25	0	Bottom	0	0.574	28.7		
Phablet	LTE Band 14	10	QPSK	A	0531M	1:1	0.01	793.00	23330	1.0	22.39	25	0	Right	0	0.629	28.3		
Phablet	LTE Band 14	10	QPSK	A	0531M	1:1	-0.12	793.00	23330	0.0	23.38	1	25	Left	0	0.150	35.5		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 14	10	QPSK	E	0531M	1:1	0.01	793.00	23330	0.0	20.83	1	0	Back	0	0.457	28.2	26.9	21.0
Phablet	LTE Band 14	10	QPSK	E	0531M	1:1	0.01	793.00	23330	0.0	20.83	1	0	Front	0	0.555	27.3		
Phablet	LTE Band 14	10	QPSK	E	0531M	1:1	0.02	793.00	23330	0.0	20.83	1	0	Top	0	0.610	26.9		
Phablet	LTE Band 14	10	QPSK	E	0531M	1:1	0.04	793.00	23330	0.0	20.83	1	0	Right	0	0.565	27.2		

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT										Approved by: Technical Manager								
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset										APPENDIX A: Page 2 of 9								

Table A-7
DSI = 0 P_{Limit} Calculations – LTE Band 26 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 26	15	QPSK	A	0531M	1:1	0.20	831.50	26865	0.0	23.75	1	74	Back	0	1.070	27.4	26.1	25.2
Phablet	LTE Band 26	15	QPSK	A	0531M	1:1	0.07	831.50	26865	0.0	23.75	1	74	Front	0	1.010	27.6		
Phablet	LTE Band 26	15	QPSK	A	0531M	1:1	0.00	831.50	26865	0.0	23.75	1	74	Bottom	0	0.996	27.7		
Phablet	LTE Band 26	15	QPSK	A	0531M	1:1	-0.17	831.50	26865	0.0	23.75	1	74	Right	0	1.440	26.1		
Phablet	LTE Band 26	15	QPSK	A	0531M	1:1	0.17	831.50	26865	0.0	23.75	1	74	Left	0	0.131	36.5		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 26	15	QPSK	E	0531M	1:1	0.21	831.50	26865	0.0	20.36	1	74	Back	0	0.490	27.4	26.9	21.0
Phablet	LTE Band 26	15	QPSK	E	0531M	1:1	-0.01	831.50	26865	0.0	20.36	1	74	Front	0	0.497	27.3		
Phablet	LTE Band 26	15	QPSK	E	0531M	1:1	-0.19	831.50	26865	0.0	20.36	1	74	Top	0	0.548	26.9		
Phablet	LTE Band 26	15	QPSK	E	0531M	1:1	0.06	831.50	26865	0.0	20.36	1	74	Right	0	0.527	27.1		

Table A-8
DSI = 0 P_{Limit} Calculations – LTE Band 66 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 66	20	QPSK	A	0708M	1:1	0.01	1745.00	132322	0.0	16.99	1	50	Back	0	0.797	21.9	21.9	17.0
Phablet	LTE Band 66	20	QPSK	A	0708M	1:1	0.09	1745.00	132322	0.0	16.99	1	50	Front	0	0.777	22.0		
Phablet	LTE Band 66	20	QPSK	A	0708M	1:1	-0.05	1745.00	132322	0.0	16.99	1	50	Bottom	0	0.775	22.0		
Phablet	LTE Band 66	20	QPSK	A	0708M	1:1	0.06	1745.00	132322	0.0	16.99	1	50	Right	0	0.086	31.6		
Phablet	LTE Band 66	20	QPSK	A	0708M	1:1	0.01	1745.00	132322	0.0	16.99	1	50	Left	0	0.071	32.4		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 66	20	QPSK	F	0708M	1:1	-0.14	1770.00	132572	0.0	19.97	1	99	Back	0	0.834	24.7	21.8	20.0
Phablet	LTE Band 66	20	QPSK	F	0708M	1:1	0.06	1770.00	132572	0.0	19.97	1	99	Front	0	0.783	25.0		
Phablet	LTE Band 66	20	QPSK	F	0708M	1:1	0.04	1770.00	132572	0.0	19.97	1	99	Top	0	1.630	21.8		
Phablet	LTE Band 66	20	QPSK	F	0708M	1:1	-0.14	1770.00	132572	0.0	19.97	1	99	Left	0	0.118	33.2		

Table A-9
DSI = 0 P_{Limit} Calculations – LTE Band 25 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 25	20	QPSK	A	0708M	1:1	0.08	1860.00	26140	0.0	16.71	1	50	Back	0	0.854	21.3	20.5	17.0
Phablet	LTE Band 25	20	QPSK	A	0708M	1:1	0.04	1860.00	26140	0.0	16.71	1	50	Front	0	0.822	21.5		
Phablet	LTE Band 25	20	QPSK	A	0708M	1:1	0.21	1860.00	26140	0.0	16.71	1	50	Bottom	0	1.040	20.5		
Phablet	LTE Band 25	20	QPSK	A	0708M	1:1	0.03	1860.00	26140	0.0	16.71	1	50	Right	0	0.099	30.7		
Phablet	LTE Band 25	20	QPSK	A	0708M	1:1	0.09	1860.00	26140	0.0	16.71	1	50	Left	0	0.075	31.9		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 25	20	QPSK	F	0708M	1:1	-0.09	1882.50	26365	0.0	19.99	1	99	Back	0	0.761	25.1	21.2	20.0
Phablet	LTE Band 25	20	QPSK	F	0708M	1:1	0.01	1882.50	26365	0.0	19.99	1	99	Front	0	0.818	24.8		
Phablet	LTE Band 25	20	QPSK	F	0708M	1:1	0.07	1882.50	26365	0.0	19.99	1	99	Top	0	1.880	21.2		
Phablet	LTE Band 25	20	QPSK	F	0708M	1:1	0.09	1882.50	26365	0.0	19.99	1	99	Left	0	0.300	29.1		

Table A-10
DSI = 0 P_{Limit} Calculations – LTE Band 30 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 30	10	QPSK	A	0510M	1:1	0.02	2310.00	27710	0.0	18.49	25	12	Back	0	0.805	23.4	21.9	19.0
Phablet	LTE Band 30	10	QPSK	A	0510M	1:1	-0.03	2310.00	27710	0.0	18.49	25	12	Front	0	0.818	23.3		
Phablet	LTE Band 30	10	QPSK	A	0510M	1:1	-0.02	2310.00	27710	0.0	18.49	25	12	Bottom	0	1.130	21.9		
Phablet	LTE Band 30	10	QPSK	A	0510M	1:1	-0.05	2310.00	27710	0.0	18.49	25	12	Right	0	0.026	38.3		
Phablet	LTE Band 30	10	QPSK	A	0510M	1:1	-0.01	2310.00	27710	0.0	18.49	25	12	Left	0	0.105	32.2		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	LTE Band 30	10	QPSK	F	0510M	1:1	0.03	2310.00	27710	0.0	18.53	25	0	Back	0	1.020	22.4	19.3	19.0
Phablet	LTE Band 30	10	QPSK	F	0510M	1:1	0.07	2310.00	27710	0.0	18.53	25	0	Front	0	0.873	23.0		
Phablet	LTE Band 30	10	QPSK	F	0510M	1:1	-0.02	2310.00	27710	0.0	18.53	25	0	Top	0	2.960	19.3		
Phablet	LTE Band 30	10	QPSK	F	0510M	1:1	-0.02	2310.00	27710	0.0	18.53	25	0	Left	0	0.180	29.9		

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	APPENDIX A: Page 3 of 9

Table A-11
DSI = 0 P_{Limit} Calculations – LTE Band 7 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EF5 Plimit [dBm]
Phablet	LTE Band 7	20	QPSK	B	0510M	1:1	0.11	2535.00	21100	0.0	18.16	1	99	Back	0	1.430	20.5	20.5	18.0
Phablet	LTE Band 7	20	QPSK	B	0510M	1:1	-0.01	2535.00	21100	0.0	18.16	1	99	Front	0	1.090	21.7		
Phablet	LTE Band 7	20	QPSK	B	0510M	1:1	0.01	2535.00	21100	0.0	18.16	1	99	Bottom	0	1.390	20.7		
Phablet	LTE Band 7	20	QPSK	B	0510M	1:1	-0.02	2535.00	21100	0.0	18.16	1	99	Right	0	0.590	24.4		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EF5 Plimit [dBm]
Phablet	LTE Band 7	20	QPSK	F	0510M	1:1	-0.04	2535.00	21100	0.0	18.78	1	50	Back	0	1.090	22.3	19.8	19.0
Phablet	LTE Band 7	20	QPSK	F	0510M	1:1	-0.21	2535.00	21100	0.0	18.78	1	50	Front	0	0.766	23.9		
Phablet	LTE Band 7	20	QPSK	F	0510M	1:1	0.05	2535.00	21100	0.0	18.78	1	50	Top	0	1.950	19.8		
Phablet	LTE Band 7	20	QPSK	F	0510M	1:1	0.01	2535.00	21100	0.0	18.78	1	50	Left	0	0.176	30.3		

Table A-12
DSI = 0 P_{Limit} Calculations – LTE Band 41 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EF5 Plimit [dBm]
Phablet	LTE Band 41	20	QPSK	B	0510M	1:1.58	-0.07	2636.50	41055	0.0	19.44	50	0	Back	0	1.290	20.3	20.3	17.0
Phablet	LTE Band 41	20	QPSK	B	0510M	1:1.58	0.01	2636.50	41055	0.0	19.44	50	0	Front	0	0.910	21.8		
Phablet	LTE Band 41	20	QPSK	B	0510M	1:1.58	0.06	2636.50	41055	0.0	19.44	50	0	Bottom	0	1.170	20.7		
Phablet	LTE Band 41	20	QPSK	B	0510M	1:1.58	-0.02	2636.50	41055	0.0	19.44	50	0	Right	0	0.584	23.7		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EF5 Plimit [dBm]
Phablet	LTE Band 41	20	QPSK	F	0510M	1:1.58	-0.05	2506.00	39750	0.0	20.46	50	0	Back	0	1.080	22.1	19.4	18.5
Phablet	LTE Band 41	20	QPSK	F	0510M	1:1.58	-0.15	2506.00	39750	0.0	20.46	50	0	Front	0	0.850	23.1		
Phablet	LTE Band 41	20	QPSK	F	0510M	1:1.58	0.02	2506.00	39750	0.0	20.46	50	0	Top	0	1.980	19.4		
Phablet	LTE Band 41	20	QPSK	F	0510M	1:1.58	0.05	2506.00	39750	0.0	20.46	50	0	Left	0	0.218	29.0		

Table A-13
DSI = 0 P_{Limit} Calculations – LTE Band 48 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EF5 Plimit [dBm]
Phablet	LTE Band 48	20	QPSK	F	0486M	1:1.58	0.02	3646.70	56207	0.0	19.17	50	25	Back	0	0.984	21.2	18.9	17.0
Phablet	LTE Band 48	20	QPSK	F	0486M	1:1.58	0.01	3646.70	56207	0.0	19.17	50	25	Front	0	0.560	23.6		
Phablet	LTE Band 48	20	QPSK	F	0486M	1:1.58	0.01	3646.70	56207	0.0	19.17	50	25	Top	0	1.660	18.9		
Phablet	LTE Band 48	20	QPSK	F	0486M	1:1.58	0.02	3646.70	56207	0.0	19.17	50	25	Left	0	0.114	30.5		

Table A-14
DSI = 0 P_{Limit} Calculations – NR Band n71 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EF5 Plimit [dBm]
Phablet	NR Band n71	35	QPSK	A	0708M	1:1	0.20	680.50	136100	DFT-s-OFDM	0.0	24.20	1	1	Back	0	0.966	28.3	26.1	26.1
Phablet	NR Band n71	35	QPSK	A	0708M	1:1	0.10	680.50	136100	DFT-s-OFDM	0.0	24.20	1	1	Front	0	0.891	28.6		
Phablet	NR Band n71	35	QPSK	A	0708M	1:1	-0.04	680.50	136100	DFT-s-OFDM	0.0	24.20	1	1	Bottom	0	0.841	28.9		
Phablet	NR Band n71	35	QPSK	A	0708M	1:1	0.17	680.50	136100	DFT-s-OFDM	0.0	24.20	1	1	Right	0	1.600	26.1		
Phablet	NR Band n71	35	QPSK	A	0708M	1:1	0.10	680.50	136100	DFT-s-OFDM	0.0	24.20	1	1	Left	0	0.075	39.4		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EF5 Plimit [dBm]
Phablet	NR Band n71	35	QPSK	E	0708M	1:1	0.03	680.50	136100	CP-OFDM	0.0	21.95	1	1	Back	0	0.329	30.7	27.9	22.0
Phablet	NR Band n71	35	QPSK	E	0537M	1:1	-0.19	680.50	136100	CP-OFDM	0.0	21.95	1	1	Front	0	0.595	28.1		
Phablet	NR Band n71	35	QPSK	E	0708M	1:1	-0.17	680.50	136100	CP-OFDM	0.0	21.95	1	1	Top	0	0.557	28.4		
Phablet	NR Band n71	35	QPSK	E	0708M	1:1	0.03	680.50	136100	CP-OFDM	0.0	21.95	1	1	Right	0	0.624	27.9		

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	APPENDIX A: Page 4 of 9

REV 1.1
04/08/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact CT.Info@Element.com.

Table A-15
DSI = 0 P_{Limit} Calculations – NR Band n12 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n12	15	QPSK	A	0708M	1:1	0.02	707.50	141500	DFT-s-OFDM	0.0	23.74	1	1	Back	0	0.786	28.7	26.8	26.1
Phablet	NR Band n12	15	QPSK	A	0708M	1:1	-0.13	707.50	141500	DFT-s-OFDM	0.0	23.74	1	1	Front	0	0.767	28.8		
Phablet	NR Band n12	15	QPSK	A	0708M	1:1	0.16	707.50	141500	DFT-s-OFDM	0.0	23.74	1	1	Bottom	0	0.511	30.6		
Phablet	NR Band n12	15	QPSK	A	0708M	1:1	-0.08	707.50	141500	DFT-s-OFDM	0.0	23.74	1	1	Right	0	1.210	26.8		
Phablet	NR Band n12	15	QPSK	A	0708M	1:1	0.01	707.50	141500	DFT-s-OFDM	0.0	23.74	1	1	Left	0	0.091	38.1		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n12	15	QPSK	E	0708M	1:1	-0.06	707.50	141500	CP-OFDM	0.0	21.70	1	1	Back	0	0.560	28.1	26.0	22.0
Phablet	NR Band n12	15	QPSK	E	0537M	1:1	0.00	707.50	141500	CP-OFDM	0.0	21.70	1	1	Front	0	0.675	27.3		
Phablet	NR Band n12	15	QPSK	E	0708M	1:1	0.07	707.50	141500	CP-OFDM	0.0	21.70	1	1	Top	0	0.908	26.0		
Phablet	NR Band n12	15	QPSK	E	0708M	1:1	-0.12	707.50	141500	CP-OFDM	0.0	21.70	1	1	Right	0	0.613	27.8		

Table A-16
DSI = 0 P_{Limit} Calculations – NR Band n14 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n14	10	QPSK	A	0708M	1:1	-0.02	793.00	158600	DFT-s-OFDM	0.0	23.76	1	1	Back	0	1.060	27.4	27.4	25.3
Phablet	NR Band n14	10	QPSK	A	0708M	1:1	0.03	793.00	158600	DFT-s-OFDM	0.0	23.76	1	1	Front	0	0.884	28.2		
Phablet	NR Band n14	10	QPSK	A	0708M	1:1	-0.09	793.00	158600	DFT-s-OFDM	0.0	23.76	1	1	Bottom	0	0.789	28.7		
Phablet	NR Band n14	10	QPSK	A	0708M	1:1	0.03	793.00	158600	DFT-s-OFDM	0.0	23.76	1	1	Right	0	0.654	29.5		
Phablet	NR Band n14	10	QPSK	A	0708M	1:1	-0.11	793.00	158600	DFT-s-OFDM	0.0	23.76	1	1	Left	0	0.113	37.2		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n14	10	QPSK	E	0708M	1:1	-0.05	793.00	158600	CP-OFDM	0.0	20.82	1	1	Back	0	0.447	28.2	26.9	21.0
Phablet	NR Band n14	10	QPSK	E	0537M	1:1	0.09	793.00	158600	CP-OFDM	0.0	20.82	1	1	Front	0	0.591	27.0		
Phablet	NR Band n14	10	QPSK	E	0708M	1:1	-0.09	793.00	158600	CP-OFDM	0.0	20.82	1	1	Top	0	0.612	26.9		
Phablet	NR Band n14	10	QPSK	E	0708M	1:1	0.11	793.00	158600	CP-OFDM	0.0	20.82	1	1	Right	0	0.584	27.0		

Table A-17
DSI = 0 P_{Limit} Calculations – NR Band n26 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n26	20	QPSK	A	0708M	1:1	0.11	831.50	166300	DFT-s-OFDM	0.0	23.92	50	28	Back	0	1.030	27.7	27.4	25.8
Phablet	NR Band n26	20	QPSK	A	0708M	1:1	0.00	831.50	166300	DFT-s-OFDM	0.0	23.92	50	28	Front	0	0.964	28.0		
Phablet	NR Band n26	20	QPSK	A	0708M	1:1	0.01	831.50	166300	DFT-s-OFDM	0.0	23.92	50	28	Bottom	0	0.746	29.1		
Phablet	NR Band n26	20	QPSK	A	0708M	1:1	0.08	831.50	166300	DFT-s-OFDM	0.0	23.92	50	28	Right	0	1.100	27.4		
Phablet	NR Band n26	20	QPSK	A	0708M	1:1	0.14	831.50	166300	DFT-s-OFDM	0.0	23.92	50	28	Left	0	0.111	37.4		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n26	20	QPSK	E	0708M	1:1	0.09	831.50	166300	DFT-s-OFDM	0.0	20.57	1	53	Back	0	0.456	27.9	26.9	21.0
Phablet	NR Band n26	20	QPSK	E	0537M	1:1	0.08	831.50	166300	DFT-s-OFDM	0.0	20.57	1	53	Front	0	0.570	26.9		
Phablet	NR Band n26	20	QPSK	E	0708M	1:1	0.11	831.50	166300	DFT-s-OFDM	0.0	20.57	1	53	Top	0	0.547	27.1		
Phablet	NR Band n26	20	QPSK	E	0708M	1:1	0.01	831.50	166300	DFT-s-OFDM	0.0	20.57	1	53	Right	0	0.489	27.5		

Table A-18
DSI = 0 P_{Limit} Calculations – NR Band n70 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n70	15	QPSK	A	0540M	1:1	0.09	1702.50	340500	CP-OFDM	0.0	17.68	1	1	Back	0	1.080	21.5	21.5	17.5
Phablet	NR Band n70	15	QPSK	A	0540M	1:1	-0.21	1702.50	340500	CP-OFDM	0.0	17.68	1	1	Front	0	0.985	21.7		
Phablet	NR Band n70	15	QPSK	A	0540M	1:1	0.03	1702.50	340500	CP-OFDM	0.0	17.68	1	1	Bottom	0	0.879	22.2		
Phablet	NR Band n70	15	QPSK	A	0540M	1:1	-0.02	1702.50	340500	CP-OFDM	0.0	17.68	1	1	Right	0	0.118	30.9		
Phablet	NR Band n70	15	QPSK	A	0540M	1:1	0.02	1702.50	340500	CP-OFDM	0.0	17.68	1	1	Left	0	0.074	32.9		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n70	15	QPSK	F	0540M	1:1	-0.07	1702.50	340500	CP-OFDM	0.0	19.33	1	1	Back	0	0.858	23.9	21.3	20.0
Phablet	NR Band n70	15	QPSK	F	0540M	1:1	-0.04	1702.50	340500	CP-OFDM	0.0	19.33	1	1	Front	0	0.813	24.2		
Phablet	NR Band n70	15	QPSK	F	0540M	1:1	-0.03	1702.50	340500	CP-OFDM	0.0	19.33	1	1	Top	0	1.560	21.3		
Phablet	NR Band n70	15	QPSK	F	0540M	1:1	0.11	1702.50	340500	CP-OFDM	0.0	19.33	1	1	Left	0	0.252	29.2		

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	APPENDIX A: Page 5 of 9

REV 1.1
04/08/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact CT.Info@Element.com.

Table A-19
DSI = 0 P_{Limit} Calculations – NR Band n66 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n66	45	QPSK	A	0540M	1:1	0.01	1745.00	349000	DFT-s-OFDM	0.0	17.13	120	0	Back	0	0.900	21.5	21.5	17.0
Phablet	NR Band n66	45	QPSK	A	0540M	1:1	-0.06	1745.00	349000	DFT-s-OFDM	0.0	17.13	120	0	Front	0	0.900	21.5		
Phablet	NR Band n66	45	QPSK	A	0540M	1:1	0.01	1745.00	349000	DFT-s-OFDM	0.0	17.13	120	0	Bottom	0	0.912	21.5		
Phablet	NR Band n66	45	QPSK	A	0540M	1:1	-0.04	1745.00	349000	DFT-s-OFDM	0.0	17.13	120	0	Right	0	0.091	31.5		
Phablet	NR Band n66	45	QPSK	A	0540M	1:1	0.14	1745.00	349000	DFT-s-OFDM	0.0	17.13	120	0	Left	0	0.068	32.7		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n66	45	QPSK	F	0540M	1:1	-0.08	1745.00	349000	DFT-s-OFDM	0.0	19.77	120	0	Back	0	0.849	24.4	21.7	20.0
Phablet	NR Band n66	45	QPSK	F	0540M	1:1	0.00	1745.00	349000	DFT-s-OFDM	0.0	19.77	120	0	Front	0	0.814	24.6		
Phablet	NR Band n66	45	QPSK	F	0540M	1:1	-0.01	1745.00	349000	DFT-s-OFDM	0.0	19.77	120	0	Top	0	1.580	21.7		
Phablet	NR Band n66	45	QPSK	F	0540M	1:1	-0.04	1745.00	349000	DFT-s-OFDM	0.0	19.77	120	0	Left	0	0.143	32.1		

Table A-20
DSI = 0 P_{Limit} Calculations – NR Band n25 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n25	40	QPSK	A	0540M	1:1	0.18	1882.50	376500	CP-OFDM	0.0	17.96	1	1	Back	0	0.807	22.8	22.3	17.0
Phablet	NR Band n25	40	QPSK	A	0540M	1:1	-0.01	1882.50	376500	CP-OFDM	0.0	17.96	1	1	Front	0	0.745	23.2		
Phablet	NR Band n25	40	QPSK	A	0540M	1:1	0.13	1882.50	376500	CP-OFDM	0.0	17.96	1	1	Bottom	0	0.908	22.3		
Phablet	NR Band n25	40	QPSK	A	0540M	1:1	-0.03	1882.50	376500	CP-OFDM	0.0	17.96	1	1	Right	0	0.091	32.3		
Phablet	NR Band n25	40	QPSK	A	0540M	1:1	0.07	1882.50	376500	CP-OFDM	0.0	17.96	1	1	Left	0	0.073	33.3		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n25	40	QPSK	F	0540M	1:1	0.02	1882.50	376500	CP-OFDM	0.0	19.82	1	1	Back	0	0.789	24.9	21.3	20.0
Phablet	NR Band n25	40	QPSK	F	0540M	1:1	0.09	1882.50	376500	CP-OFDM	0.0	19.82	1	1	Front	0	0.794	24.8		
Phablet	NR Band n25	40	QPSK	F	0540M	1:1	0.07	1882.50	376500	CP-OFDM	0.0	19.82	1	1	Top	0	1.770	21.3		
Phablet	NR Band n25	40	QPSK	F	0540M	1:1	0.04	1882.50	376500	CP-OFDM	0.0	19.82	1	1	Left	0	0.239	30.0		

Table A-21
DSI = 0 P_{Limit} Calculations – NR Band n30 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n30	10	QPSK	A	0540M	1:1	0.02	2310.00	462000	DFT-s-OFDM	0.0	18.51	25	27	Back	0	0.733	23.8	23.8	19.0
Phablet	NR Band n30	10	QPSK	A	0540M	1:1	-0.01	2310.00	462000	DFT-s-OFDM	0.0	18.51	25	27	Front	0	0.628	24.5		
Phablet	NR Band n30	10	QPSK	A	0540M	1:1	0.14	2310.00	462000	DFT-s-OFDM	0.0	18.51	25	27	Bottom	0	0.734	23.8		
Phablet	NR Band n30	10	QPSK	A	0540M	1:1	-0.11	2310.00	462000	DFT-s-OFDM	0.0	18.51	25	27	Right	0	0.031	37.3		
Phablet	NR Band n30	10	QPSK	A	0540M	1:1	0.09	2310.00	462000	DFT-s-OFDM	0.0	18.51	25	27	Left	0	0.082	32.8		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n30	10	QPSK	F	0540M	1:1	-0.06	2310.00	462000	DFT-s-OFDM	0.0	18.89	25	14	Back	0	0.788	23.9	19.3	19.0
Phablet	NR Band n30	10	QPSK	F	0540M	1:1	0.03	2310.00	462000	DFT-s-OFDM	0.0	18.89	25	14	Front	0	0.947	23.1		
Phablet	NR Band n30	10	QPSK	F	0540M	1:1	-0.01	2310.00	462000	DFT-s-OFDM	0.0	18.89	25	14	Top	0	2.270	19.3		
Phablet	NR Band n30	10	QPSK	F	0540M	1:1	-0.13	2310.00	462000	DFT-s-OFDM	0.0	18.89	25	14	Left	0	0.081	33.2		

Table A-22
DSI = 0 P_{Limit} Calculations – NR Band n7 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n7	50	QPSK	B	0540M	1:1	-0.04	2535.00	507000	CP-OFDM	0.0	18.37	1	1	Back	0	1.700	20.0	19.7	18.0
Phablet	NR Band n7	50	QPSK	B	0540M	1:1	0.00	2535.00	507000	CP-OFDM	0.0	18.37	1	1	Front	0	1.150	21.7		
Phablet	NR Band n7	50	QPSK	B	0540M	1:1	-0.10	2535.00	507000	CP-OFDM	0.0	18.37	1	1	Bottom	0	1.830	19.7		
Phablet	NR Band n7	50	QPSK	B	0540M	1:1	-0.01	2535.00	507000	CP-OFDM	0.0	18.37	1	1	Right	0	0.692	23.9		
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EPS Plimit [dBm]
Phablet	NR Band n7	50	QPSK	F	0540M	1:1	0.04	2535.00	507000	CP-OFDM	0.0	19.53	1	1	Back	0	1.010	23.4	19.9	19.0
Phablet	NR Band n7	50	QPSK	F	0540M	1:1	-0.11	2535.00	507000	CP-OFDM	0.0	19.53	1	1	Front	0	0.841	24.2		
Phablet	NR Band n7	50	QPSK	F	0540M	1:1	-0.12	2535.00	507000	CP-OFDM	0.0	19.53	1	1	Top	0	2.290	19.9		
Phablet	NR Band n7	50	QPSK	F	0540M	1:1	0.04	2535.00	507000	CP-OFDM	0.0	19.53	1	1	Left	0	0.201	30.4		

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	APPENDIX A: Page 6 of 9

REV 1.1
04/08/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact CT.Info@Element.com.

Table A-23
DSI = 0 P_{Limit} Calculations – NR Band n41 Antenna F Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n41	100	QPSK	F	1	0510M	1:1	0.01	2592.99	518598	DFT-s-OFDM	0.0	18.65	135	138	Back	0	1.100	22.2	19.3	18.5
Phablet	NR Band n41	100	QPSK	F	1	0510M	1:1	0.04	2592.99	518598	DFT-s-OFDM	0.0	18.65	135	138	Front	0	0.943	22.8		
Phablet	NR Band n41	100	QPSK	F	1	0510M	1:1	-0.05	2592.99	518598	DFT-s-OFDM	0.0	18.65	135	138	Top	0	2.180	19.3		
Phablet	NR Band n41	100	QPSK	F	1	0510M	1:1	-0.06	2592.99	518598	DFT-s-OFDM	0.0	18.65	135	138	Left	0	0.296	29.4		
Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]				
Phablet	NR Band n41	100	F	2	0510M	1:1	0.07	2592.99	518598	CW/SRS	18.95	Top	0	2.140	19.6	19.6	18.5				

Table A-24
DSI = 0 P_{Limit} Calculations – NR Band n41 Antenna B Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n41	100	QPSK	B	2	0510M	1:1	-0.03	2592.99	518598	DFT-s-OFDM	0.0	17.47	1	271	Back	0	1.360	20.1	19.6	17.0
Phablet	NR Band n41	100	QPSK	B	2	0510M	1:1	0.01	2592.99	518598	DFT-s-OFDM	0.0	17.47	1	271	Front	0	0.953	21.6		
Phablet	NR Band n41	100	QPSK	B	2	0510M	1:1	0.03	2592.99	518598	DFT-s-OFDM	0.0	17.47	1	271	Bottom	0	1.500	19.6		
Phablet	NR Band n41	100	QPSK	B	2	0510M	1:1	-0.01	2592.99	518598	DFT-s-OFDM	0.0	17.47	1	271	Right	0	0.143	29.8		
Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]				
Phablet	NR Band n41	100	B	1	0510M	1:1	0.00	2592.99	518598	CW/SRS	17.40	Bottom	0	1.310	20.2	20.2	17.0				

Table A-25
DSI = 0 P_{Limit} Calculations – NR Band n41 Antenna E Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n41	100	E	1	0510M	1:1	0.09	2592.99	518598	CW/SRS	15.75	Back	0	0.164	27.5	24.3	15.5
Phablet	NR Band n41	100	E	1	0510M	1:1	0.06	2592.99	518598	CW/SRS	15.75	Front	0	0.343	24.3		
Phablet	NR Band n41	100	E	1	0510M	1:1	0.06	2592.99	518598	CW/SRS	15.75	Top	0	0.227	26.1		
Phablet	NR Band n41	100	E	1	0510M	1:1	0.03	2592.99	518598	CW/SRS	15.75	Right	0	0.009	40.1		
Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n41	100	E	2	0510M	1:1	-0.04	2592.99	518598	CW/SRS	16.06	Front	0	0.370	24.3	24.3	15.5

Table A-26
DSI = 0 P_{Limit} Calculations – NR Band n41 Antenna D Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n41	100	D	1	0510M	1:1	-0.11	2592.99	518598	CW/SRS	15.73	Back	0	0.670	21.4	21.4	15.5
Phablet	NR Band n41	100	D	1	0510M	1:1	-0.04	2592.99	518598	CW/SRS	15.73	Front	0	0.014	38.2		
Phablet	NR Band n41	100	D	1	0510M	1:1	0.02	2592.99	518598	CW/SRS	15.73	Bottom	0	0.056	32.2		
Phablet	NR Band n41	100	D	1	0510M	1:1	0.07	2592.99	518598	CW/SRS	15.73	Left	0	0.008	40.6		
Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n41	100	D	2	0510M	1:1	-0.01	2592.99	518598	CW/SRS	15.80	Back	0	0.675	21.4	21.4	15.5

Table A-27
DSI = 0 P_{Limit} Calculations – NR Band n48 Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n48	40	QPSK	F	0486M	1:1	0.01	3679.98	645332	DFT-s-OFDM	0.0	17.76	1	1	Back	0	0.926	22.0	19.4	17.0
Phablet	NR Band n48	40	QPSK	F	0486M	1:1	0.02	3679.98	645332	DFT-s-OFDM	0.0	17.76	1	1	Front	0	0.645	23.6		
Phablet	NR Band n48	40	QPSK	F	0486M	1:1	0.01	3679.98	645332	DFT-s-OFDM	0.0	17.76	1	1	Top	0	1.700	19.4		
Phablet	NR Band n48	40	QPSK	F	0486M	1:1	-0.08	3679.98	645332	DFT-s-OFDM	0.0	17.76	1	1	Left	0	0.113	31.2		

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT												Approved by: Technical Manager							
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset												APPENDIX A: Page 7 of 9							

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n48	40	C	0486M	1:1	0.03	3570.00	638000	CW/SRS	12.85	Back	0	0.297	22.1	16.8	12.5
Phablet	NR Band n48	40	C	0486M	1:1	0.07	3570.00	638000	CW/SRS	12.85	Front	0	0.342	21.4		
Phablet	NR Band n48	40	C	0486M	1:1	0.16	3570.00	638000	CW/SRS	12.85	Bottom	0	0.127	25.7		
Phablet	NR Band n48	40	C	0486M	1:1	-0.02	3570.00	638000	CW/SRS	12.85	Right	0	0.988	16.8		
Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n48	40	H	0486M	1:1	0.02	3679.98	645332	CW/SRS	17.25	Back	0	1.110	20.7	20.7	17.0
Phablet	NR Band n48	40	H	0486M	1:1	0.05	3679.98	645332	CW/SRS	17.25	Front	0	1.020	21.1		
Phablet	NR Band n48	40	H	0486M	1:1	0.06	3679.98	645332	CW/SRS	17.25	Top	0	0.032	36.1		
Phablet	NR Band n48	40	H	0486M	1:1	0.03	3679.98	645332	CW/SRS	17.25	Left	0	0.243	27.3		
Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n48	40	D	0486M	1:1	-0.01	3624.99	641666	CW/SRS	12.61	Back	0	0.164	24.4	24.4	12.5
Phablet	NR Band n48	40	D	0486M	1:1	0.04	3624.99	641666	CW/SRS	12.61	Front	0	0.002	43.5		
Phablet	NR Band n48	40	D	0486M	1:1	0.02	3624.99	641666	CW/SRS	12.61	Bottom	0	0.011	36.1		
Phablet	NR Band n48	40	D	0486M	1:1	0.02	3624.99	641666	CW/SRS	12.61	Left	0	0.000	56.5		

Table A-28
DSI = 0 P_{Limit} Calculations – NR Band n77 Antenna F Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n77	100	QPSK	F	UL-MIMO	0735M	1:1	0.05	3930.00	662000	DFT-s-OFDM	0.0	17.13	1	1	Back	0	0.829	21.9	19.0	16.5
Phablet	NR Band n77 DoD	100	QPSK	F	UL-MIMO	0735M	1:1	0.01	3500.01	633334	DFT-s-OFDM	0.0	17.19	135	138	Back	0	0.812	22.0		
Phablet	NR Band n77	100	QPSK	F	UL-MIMO	0735M	1:1	-0.02	3930.00	662000	DFT-s-OFDM	0.0	17.13	1	1	Front	0	0.418	24.8		
Phablet	NR Band n77 DoD	100	QPSK	F	UL-MIMO	0735M	1:1	-0.02	3500.01	633334	DFT-s-OFDM	0.0	17.19	135	138	Front	0	0.864	21.8		
Phablet	NR Band n77	100	QPSK	F	UL-MIMO	0735M	1:1	0.03	3930.00	662000	DFT-s-OFDM	0.0	17.13	1	1	Top	0	1.179	20.4		
Phablet	NR Band n77 DoD	100	QPSK	F	UL-MIMO	0735M	1:1	-0.03	3500.01	633334	DFT-s-OFDM	0.0	17.19	135	138	Top	0	1.620	19.0		
Phablet	NR Band n77	100	QPSK	F	UL-MIMO	0735M	1:1	-0.01	3930.00	662000	DFT-s-OFDM	0.0	17.13	1	1	Left	0	0.131	29.9		
Phablet	NR Band n77 DoD	100	QPSK	F	UL-MIMO	0735M	1:1	-0.02	3500.01	633334	DFT-s-OFDM	0.0	17.19	135	138	Left	0	0.114	30.6		

Table A-29
DSI = 0 P_{Limit} Calculations – NR Band n77 Antenna C Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	MPR [dB]	Conducted Power [dBm]	RB Size	RB Offset	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n77	100	QPSK	C	UL-MIMO	0735M	1:1	-0.02	3930.00	662000	CP-OFDM	0.0	17.49	1	1	Back	0	0.205	28.3	17.8	16.5
Phablet	NR Band n77	100	QPSK	C	UL-MIMO	0735M	1:1	0.07	3930.00	662000	CP-OFDM	0.0	17.49	1	1	Front	0	0.743	22.7		
Phablet	NR Band n77	100	QPSK	C	UL-MIMO	0735M	1:1	-0.01	3930.00	662000	CP-OFDM	0.0	17.49	1	1	Bottom	0	0.623	23.5		
Phablet	NR Band n77 DoD	100	QPSK	C	UL-MIMO	0735M	1:1	-0.05	3500.01	633334	CP-OFDM	0.0	17.20	1	1	Right	0	2.130	17.8		
Phablet	NR Band n77	100	QPSK	C	UL-MIMO	0735M	1:1	0.06	3930.00	662000	CP-OFDM	0.0	17.49	1	1	Right	0	2.150	18.1		
Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]				
Phablet	NR Band n77 DoD	100	C	Default	0735M	1:1	0.05	3500.01	633334	CW/SRS	12.26	Right	0	0.861	16.8	16.8	11.5				
Phablet	NR Band n77	100	C	Default	0735M	1:1	0.05	3750.00	650000	CW/SRS	11.94	Right	0	0.743	17.2						

Table A-30
DSI = 0 P_{Limit} Calculations – NR Band n77 Antenna H Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n77	100	H	0735M	1:1	0.05	3930.00	662000	CW/SRS	16.35	Back	0	0.909	20.7	19.7	16.5
Phablet	NR Band n77 DoD	100	H	0735M	1:1	-0.01	3500.01	633334	CW/SRS	16.21	Front	0	1.100	19.7		
Phablet	NR Band n77	100	H	0735M	1:1	-0.10	3930.00	662000	CW/SRS	16.35	Front	0	1.040	20.1		
Phablet	NR Band n77	100	H	0735M	1:1	-0.10	3930.00	662000	CW/SRS	16.35	Left	0	0.271	25.9		

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	APPENDIX A: Page 8 of 9

REV 1.1
04/08/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact CT.Info@Element.com.

Table A-31
DSI = 0 P_{Limit} Calculations – NR Band n77 Antenna D Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n77 DoD	100	D	UL-MIMO	0735M	1:1	0.01	3500.01	633334	CW/SRS	16.77	Back	0	0.353	25.2	23.3	16.0
Phablet	NR Band n77	100	D	UL-MIMO	0735M	1:1	-0.08	3930.00	662000	CW/SRS	16.69	Back	0	0.543	23.3		
Phablet	NR Band n77	100	D	UL-MIMO	0735M	1:1	0.01	3930.00	662000	CW/SRS	16.69	Front	0	0.022	37.2		
Phablet	NR Band n77	100	D	UL-MIMO	0735M	1:1	0.08	3930.00	662000	CW/SRS	16.69	Bottom	0	0.064	32.6		
Phablet	NR Band n77	100	D	UL-MIMO	0735M	1:1	0.04	3930.00	662000	CW/SRS	16.69	Left	0	0.025	36.6		
Exposure	Band / Mode	Bandwidth [MHz]	Ant.	Path	Serial Number	Duty Cycle	Power Drift [dB]	Frequency [MHz]	Channel #	Waveform	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	NR Band n77 DoD	100	D	Default	0735M	1:1	0.00	3500.01	633334	CW/SRS	11.38	Back	0	0.112	24.8	23.1	11.5
Phablet	NR Band n77	100	D	Default	0735M	1:1	-0.02	3930.00	662000	CW/SRS	11.48	Back	0	0.172	23.1		

Table A-32
DSI = 0 P_{Limit} Calculations – 2.4 GHz WIFI Phablet SAR

Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]	
Phablet	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	G	0509M	98.77	-0.05	2437.00	6	1.0	19.67	Back	0	1.890	20.8	20.0	19.7	
Phablet	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	G	0509M	98.77	-0.01	2437.00	6	1.0	19.67	Front	0	1.190	22.8			
Phablet	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	G	0509M	98.77	0.10	2437.00	6	1.0	19.67	Top	0	0.625	25.6			
Phablet	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	G	0509M	98.77	-0.07	2437.00	6	1.0	19.67	Left	0	2.240	20.0			
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]	
Phablet	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	I	0509M	98.72	-0.01	2437.00	6	1.0	19.71	Back	0	0.482	26.8	22.5	19.9	
Phablet	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	I	0509M	98.72	0.02	2437.00	6	1.0	19.71	Front	0	1.280	22.5			
Phablet	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	I	0509M	98.72	0.05	2437.00	6	1.0	19.71	Top	0	0.016	41.5			
Phablet	2.4 GHz WiFi/ IEEE 802.11b	22	DSSS	I	0509M	98.72	-0.08	2437.00	6	1.0	19.71	Right	0	0.363	28.0			
Exposure	Band / Mode	Bandwidth [MHz]	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Conducted Power [dBm]	Conducted Power (2nd ant) [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	2.4 GHz WiFi/ IEEE 802.11g	20	OFDM	MIMO	0509M	89.71	-0.03	2417.00	2	6.0	17.37	17.32	Back	0	1.080	20.4	20.2	17.9
Phablet	2.4 GHz WiFi/ IEEE 802.11g	20	OFDM	MIMO	0509M	89.71	0.04	2417.00	2	6.0	17.37	17.32	Front	0	0.660	22.6		
Phablet	2.4 GHz WiFi/ IEEE 802.11g	20	OFDM	MIMO	0509M	89.71	0.03	2417.00	2	6.0	17.37	17.32	Top	0	0.365	25.2		
Phablet	2.4 GHz WiFi/ IEEE 802.11g	20	OFDM	MIMO	0509M	89.71	0.14	2417.00	2	6.0	17.37	17.32	Right	0	0.157	28.8		
Phablet	2.4 GHz WiFi/ IEEE 802.11g	20	OFDM	MIMO	0509M	89.71	0.02	2417.00	2	6.0	17.37	17.32	Left	0	1.130	20.2		

Table A-33
DSI = 0 P_{Limit} Calculations – 2.4 GHz Bluetooth Phablet SAR

Exposure	Band / Mode	Service / Modulation	Ant.	Serial Number	Duty Cycle [%]	Power Drift [dB]	Frequency [MHz]	Channel #	Data Rate [Mbps]	Conducted Power [dBm]	Test Position	Spacing [mm]	Measured 10g SAR [W/kg]	Plimit [dBm]	Overall Plimit [dBm]	EFS Plimit [dBm]
Phablet	2.4 GHz Bluetooth	FHSS	G	0520M	76.80	0.01	2441.00	39	1	19.82	Back	0	1.350	21.5	20.8	18.6
Phablet	2.4 GHz Bluetooth	FHSS	G	0520M	76.80	0.08	2441.00	39	1	19.82	Front	0	0.803	23.8		
Phablet	2.4 GHz Bluetooth	FHSS	G	0520M	76.80	-0.13	2441.00	39	1	19.82	Top	0	0.416	26.6		
Phablet	2.4 GHz Bluetooth	FHSS	G	0520M	76.80	-0.04	2441.00	39	1	19.82	Left	0	1.610	20.8		
Phablet	2.4 GHz Bluetooth LE	DSSS	G	0548M	85.30	0.08	2440.00	19	1	19.88	Left	0	1.060	23.1		

FCC ID: A3LSMS948U	RF EXPOSURE PART 0 TEST REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-02.A3L	DUT Type: Portable Handset	APPENDIX A: Page 9 of 9

ELEMENT MATERIALS TECHNOLOGY

(formerly PCTEST)
7185 Oakland Mills Road, Columbia, MD 21046 USA
Tel. +1.410.290.6652 / Fax +1.410.290.6654
<http://www.element.com>



COMPLIANCE SUMMARY REPORT

Applicant Name:

Samsung Electronics Co., Ltd.
129, Samsung-ro, Maetan dong,
Yeongtong-gu, Suwon-si
Gyeonggi-do, 16677, Korea

Test Site/Location:

Element, Columbia, MD, USA

Document Serial No.:

1M2508250078-05.A3L

FCC ID:

A3LSMS948U

APPLICANT:

SAMSUNG ELECTRONICS CO., LTD

Report Type:

Compliance Summary

DUT Type:

Portable Handset

Model(s):

SM-S948U

Additional Model(s):

SM-S948U1



CERT #2041.01

FCC ID: A3LSMS948U	COMPLIANCE SUMMARY REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-05.A3L	DUT Type: Portable Handset	Page 1 of 10

REV 1.1
04/11/2022

TABLE OF CONTENTS

1	STRATEGY FOR COMPLIANCE DEMONSTRATION	3
1.1	RF Exposure Evaluation Strategy	3
1.2	Nomenclature	4
1.3	Bibliography	4
2	TIME AVERAGING ALGORITHM	5
2.1	Algorithm Description	5
2.2	Basic concept of the algorithm	6
2.3	Configurable Parameters	8
3	DUT DESCRIPTION	9
3.1	Device Overview	9
4	COMPLIANCE SUMMARY	10
4.1	RF Exposure Compliance Summary	10

FCC ID: A3LSMS948U	COMPLIANCE SUMMARY REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-05.A3L	DUT Type: Portable Handset	Page 2 of 10

REV 1.1
04/11/2022

1 STRATEGY FOR COMPLIANCE DEMONSTRATION

1.1 RF Exposure Evaluation Strategy

The FCC RF exposure limits defined based on time-averaged RF exposure. The device under test (DUT) uses the Qualcomm Smart Transmit feature to control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is in compliance with the FCC requirement for 2G/3G/4G/5G NR/WLAN/BT/NTN operations. Additionally, this device supports NFC/WPT technologies but the output power of these modems is not controlled by the smart transmit algorithm.

Demonstrating compliance of DUT enabled with Qualcomm Smart Transmit feature is completed in three parts:

0. RF Exposure Compliance Test Report Part 0: SAR Characterization and PD Characterization

The SAR and PD Characterization, denoted as SAR Char and PD Char, determines the power limit that meets FCC exposure requirement after accounting for device design related uncertainties for each supported radio configuration and RF exposure usage scenario. The determined power limits will be loaded and stored in the EUT via the Embedded File System (EFS), and then used as inputs for Smart Transmit to operate.

For 2G/3G/4G/5G Sub6/WLAN/BT/NTN, SAR Char is derived from SAR test measurements and conducted power measurements to determine P_{Limit} for each technology/band. For 5G mmW NR, PD Char is derived using simulation in combination with measurement as validation to determine the *input.power.limit* for each radio/antenna configuration (each beam). The P_{Limit} and *input.power.limit* represents the maximum time-averaged power level for the corresponding radio/antenna configuration.

1. RF Exposure Compliance Test Report Part 1: Test in Static Transmission Condition

Part 1 demonstrates that DUT meets FCC SAR and PD limits when transmitting at pre-determined maximum time-averaged power level: P_{Limit} for 2G/3G/4G/5G Sub6 NR/WLAN/BT/NTN and *input.power.limit* for 5G mmW NR. The SAR and PD measurement in Part 1 is under static transmission condition.

The exposure from the simultaneous transmission and mutual exclusivity of antenna groups is evaluated in the Part 1 report.

2. RF Exposure Compliance Test Report Part 2: Test in Dynamic Transmission Condition

Part 2 demonstrates compliance in Tx varying transmission conditions and validates Qualcomm Smart Transmit algorithm. The test results reported in Part 2 demonstrates that DUT complies with FCC RF exposure requirement under Tx varying transmission scenarios, thereby validity of Qualcomm Smart Transmit algorithm.

FCC ID: A3LSMS948U	COMPLIANCE SUMMARY REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-05.A3L	DUT Type: Portable Handset	Page 3 of 10

REV 1.1
04/11/2022

1.2 Nomenclature

Applicable Technologies	Term	Description
2G/3G/4G/5G Sub6/WLAN/BT/NTN	P_{Limit}	Power level that corresponds to the exposure design target (SAR_design_target) after accounting for all device design related uncertainties
	P_{Max}	Maximum tune up output power
	T_{SAR}	Defined time averaging window for $f < 6$ GHz
	SAR_design_target	Target SAR level resulting in maximum time-averaged exposure optimized from total uncertainty
	SAR_Char	Table containing P_{limit} for all technologies
5G mmW NR	$input.power.limit$	Power level at antenna element for each beam corresponding to the exposure design target (PD_design_target)
	T_{PD}	Defined time averaging window for $f > 6$ GHz
	PD_design_target	Target PD level resulting in maximum time-averaged exposure optimized from total uncertainty
	PD_Char	Table containing $input.power.limit$ for all beams
2G/3G/4G/5G Sub6/5G mmW NR/WLAN/BT/NTN	$regulatory_body$	Regulatory body that the algorithm is designed to comply. Algorithm's time averaging window is dependent on either FCC or ICNIRP requirements.

1.3 Bibliography

Report Type	Report Serial Number
RF Exposure Part 1 Test Report	1M2508250078-01.A3L
PD Part 1 Test Report	1M2508250078-04.A3L
RF Exposure Part 0 Test Report	1M2508250078-02.A3L
PD Part 0 Test Report	
RF Exposure Part 2 Test Report	1M2508250078-03.A3L

FCC ID: A3LSMS948U	COMPLIANCE SUMMARY REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-05.A3L	DUT Type: Portable Handset	Page 4 of 10

REV 1.1
04/11/2022

2 TIME AVERAGING ALGORITHM

2.1 Algorithm Description

The FCC RF exposure limit is defined based on time-averaged RF exposure. When running in a wireless device, Qualcomm Smart Transmit algorithm enables more elegant power control mechanisms for RF exposure management. It ensures at all times the wireless device is in compliance with the FCC limit of RF exposure time-averaged over a defined time window, denoted as T_{SAR} and T_{PD} for specific absorption rate (SAR for transmit frequency < 6 GHz) and power density (PD for transmit frequency > 6 GHz) time windows, respectively.

The Smart Transmit algorithm not only ensures the wireless device complies with RF exposure requirement, but also improves the user experience and network performance.

For a given wireless device, RF exposure is proportional to the transmitting power.

- Once the SAR and PD of the wireless device is characterized at a transmit power level, RF exposure at a different power level for the characterized configurations can be scaled by the change in the corresponding power level.
- Therefore, for a characterized device, RF exposure compliance can be achieved through transmit power control and management.

The Smart Transmit algorithm embedded in Qualcomm modems reliably controls the transmit power of the wireless device in real time to maintain the time-averaged transmit power, in turn, time-averaged RF exposure, below the predefined time-averaged power limit for each characterized technology and band.

- This predefined time-averaged power limit is denoted as P_{Limit} corresponding SAR limit (frequency < 6 GHz) and *input.power.limit* corresponding PD limit (frequency > 6 GHz) in this report.
- The wireless device continuously transmitting at P_{Limit} level or *input.power.limit* level complies with the FCC RF exposure requirement.

In a simultaneous transmission scenario, the algorithm manages all active transmitters and make sure the total exposure ratio from each transmitter not exceeding to 1.

FCC ID: A3LSMS948U	COMPLIANCE SUMMARY REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-05.A3L	DUT Type: Portable Handset	Page 5 of 10

REV 1.1
04/11/2022

2.2 Basic concept of the algorithm

The Smart Transmit algorithm controls and manages the instantaneous transmit power (Tx) to maintain the time-averaged Tx power and therefore, time-averaged RF exposure in compliance with FCC limits.

- If time-averaged transmit power approaches P_{Limit} or *input.power.limit*, then the modem needs to limit instantaneous transmit power to ensure the time-averaged transmit power does not exceed P_{Limit} or *input.power.limit* in any T_{SAR} and T_{PD} time windows since the time-averaged RF exposure is required to comply with the FCC RF exposure limit in any T_{SAR} or T_{PD} time window.
- The wireless device can instantaneously transmit at high transmit powers and exceed the P_{Limit} or *input.power.limit* level for a short duration before limiting the power to maintain the time-averaged transmit power under P_{Limit} or *input.power.limit*.
- If the wireless device transmits at high power for a long time, then the radio link needs to be dropped to be compliant with time-averaged Tx power requirement (see Figure 2-1).
- To avoid dropping the radio link, Smart Transmit algorithm starts the power limiting enforcement earlier in time to back off the Tx power to a reserve level (denoted as $P_{reserve}$), so the wireless device can maintain the radio link at a minimum reserve power level for as long as needed, and at the same time ensure the time-averaged Tx power over any defined time window is less than P_{Limit} at all times (see Figure 2-2). At all times, Smart Transmit meets the below equation:

$$time.avg.Tx\ power = \frac{1}{T_{SAR}} \int_{t-T_{SAR}}^t inst.Tx\ power(t) dt \leq P_{limit}$$

Equation 2-1

where, *time.avg.Tx power* is the transmit power averaged between $t-T_{SAR}$ and t time period; T_{SAR} is the time window defined by FCC for time-averaging RF exposure for Tx frequency less than 6GHz (sub6); *inst. Tx power (t)* is the instantaneous transmit power at t time instant; P_{Limit} is the predefined time-averaged power limit. Similarly, Smart Transmit meets the below equation for mmW transmission:

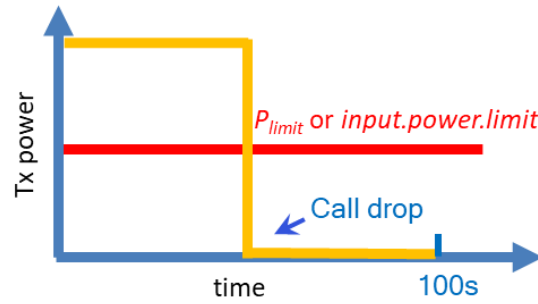
$$mmW_time.avg.Tx\ power = \frac{1}{T_{PD}} \int_{t-T_{PD}}^t mmW_Tx\ power(t) dt \leq input.power.limit$$

Equation 2-2

where, *mmW_time.avg.Tx power* is the mmW transmit power averaged between $t-T_{PD}$ and t time period; T_{PD} is the time window defined by FCC for time-averaging RF exposure for mmW bands; *mmW_Tx power (t)* is the instantaneous mmW transmit power at t time instant; *input.power.limit* is the predefined time-averaged power limit for the beam under test.

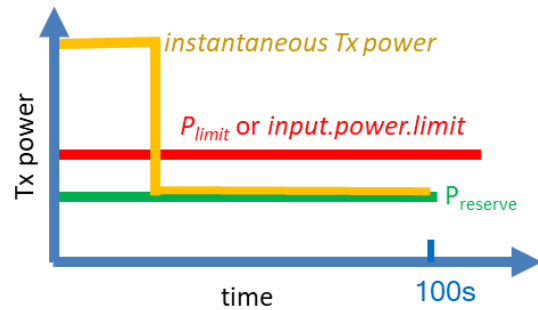
FCC ID: A3LSMS948U	COMPLIANCE SUMMARY REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-05.A3L	DUT Type: Portable Handset	Page 6 of 10

REV 1.1
04/11/2022



(a)

Figure 2-1
Transmit at high power when needed and permitted



(b)

Figure 2-2
Transmit with reserve power to support continuous transmission at a minimum power level ($P_{reserve}$)

- In the case of simultaneous transmission, Smart Transmit manages all active transmitters and make sure the total exposure ratio is less than 1

$$\sum \frac{\frac{1}{T_{SAR}} \int_{t-T_{SAR}}^t SAR(t) dt}{FCC SAR limit} + \sum \frac{\frac{1}{T_{PD}} \int_{t-T_{psPD}}^t 4cm^2 psPD(t) dt}{FCC psPD limit} \leq 1$$

Equation 2-3

FCC ID: A3LSMS948U	COMPLIANCE SUMMARY REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-05.A3L	DUT Type: Portable Handset	Page 7 of 10

REV 1.1
04/11/2022

2.3 Configurable Parameters

The following input parameters are required for functionality of Qualcomm Smart Transmit algorithm. These parameters cannot be accessed by the end user, because at the factory they are entered through the embedded file system (EFS) entries by the OEM

Input Parameter	Description
<i>regulatory body</i>	- Inputs of “0” and “1” corresponding to FCC and ICNIRP requirements for the averaging time windows. - For FCC, algorithm uses an averaging window of 100 seconds for $f < 3$ GHz, 60 seconds for $3 \text{ GHz} < f < 6 \text{ GHz}$, and 4 seconds for $24 \text{ GHz} < f < 42 \text{ GHz}$.
<i>Tx_power_at_SAR_design_target</i> (P_{Limit} in dBm) $f < 6 \text{ GHz}$	The maximum time-averaged transmit power, in dBm, corresponding to the <i>SAR_design_target</i>. <i>SAR_design_target</i> is pre-determined for this DUT and it is less than regulatory SAR limit after accounting for all design related tolerances. The time-averaged SAR is assessed against this <i>SAR_design_target</i> in real time to determine the compliance. P_{Limit} could vary with technology, band and Device State Index (DSI) and therefore, it has the unique value for each technology, band and DSI.
<i>input.power.limit</i> in dBm $f \geq 6 \text{ GHz}$	Maximum time-averaged power at the input of antenna element port at which each antenna configuration/beam meets <i>PD_design_target</i> .

FCC ID: A3LSMS948U	COMPLIANCE SUMMARY REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-05.A3L	DUT Type: Portable Handset	Page 8 of 10

REV 1.1
04/11/2022

3 DUT DESCRIPTION

3.1 Device Overview

Band & Mode	Operating Modes	Tx Frequency
GSM/GPRS/EDGE 850	Voice/Data	824.20 - 848.80 MHz
GSM/GPRS/EDGE 1900	Voice/Data	1850.20 - 1909.80 MHz
UMTS 850	Voice/Data	826.40 - 846.60 MHz
UMTS 1750	Voice/Data	1712.4 - 1752.6 MHz
UMTS 1900	Voice/Data	1852.4 - 1907.6 MHz
LTE Band 71	Voice/Data	665.5 - 695.5 MHz
LTE Band 12	Voice/Data	699.7 - 715.3 MHz
LTE Band 13	Voice/Data	779.5 - 784.5 MHz
LTE Band 14	Voice/Data	790.5 - 795.5 MHz
LTE Band 26	Voice/Data	814.7 - 848.3 MHz
LTE Band 5	Voice/Data	824.7 - 848.3 MHz
LTE Band 66	Voice/Data	1710.7 - 1779.3 MHz
LTE Band 4	Voice/Data	1710.7 - 1754.3 MHz
LTE Band 25	Voice/Data	1850.7 - 1914.3 MHz
LTE Band 2	Voice/Data	1850.7 - 1909.3 MHz
LTE Band 30	Voice/Data	2307.5 - 2312.5 MHz
LTE Band 7	Voice/Data	2502.5 - 2567.5 MHz
LTE Band 41	Voice/Data	2498.5 - 2687.5 MHz
LTE Band 38	Voice/Data	2572.5 - 2617.5 MHz
LTE Band 48	Voice/Data	3552.5 - 3697.5 MHz
NR Band n71	Voice/Data	665.5 - 695.5 MHz
NR Band n12	Voice/Data	701.5 - 713.5 MHz
NR Band n14	Voice/Data	790.5 - 795.5 MHz
NR Band n26	Voice/Data	816.5 - 846.5 MHz
NR Band n5	Voice/Data	826.5 - 846.5 MHz
NR Band n70	Voice/Data	1697.5 - 1707.5 MHz
NR Band n66	Voice/Data	1712.5 - 1777.5 MHz
NR Band n25	Voice/Data	1852.5 - 1912.5 MHz
NR Band n2	Voice/Data	1852.5 - 1907.5 MHz
NR Band n30	Voice/Data	2307.5 - 2312.5 MHz
NR Band n7	Voice/Data	2502.5 - 2567.5 MHz
NR Band n41	Voice/Data	2501.01 - 2685 MHz
NR Band n38	Voice/Data	2575 - 2615 MHz
NR Band n48	Voice/Data	3555 - 3694.98 MHz
NR Band n78	Voice/Data	3455.01 - 3544.98 MHz; 3705 - 3795 MHz
NR Band n77	Voice/Data	3455.01 - 3544.98 MHz; 3705 - 3975 MHz
NTN Band n255	Data	1629 - 1658 MHz
NR Band n258	Data	24250 - 24450 MHz; 24750 - 25250 MHz
NR Band n260	Data	37000 - 40000 MHz
NR Band n261	Data	27500 - 28350 MHz
2.4 GHz WIFI	Voice/Data	2412 - 2462 MHz
5 GHz WIFI	Voice/Data	U-NII-1: 5180 - 5240 MHz U-NII-2A: 5260 - 5320 MHz U-NII-2C: 5500 - 5720 MHz U-NII-3: 5745 - 5825 MHz U-NII-4: 5845 - 5885 MHz
6 GHz WIFI	Voice/Data	U-NII-5: 5935 - 6415 MHz U-NII-6: 6435 - 6515 MHz U-NII-7: 6535 - 6875 MHz U-NII-8: 6895 - 7115 MHz
2.4 GHz Bluetooth	Data	2402 - 2480 MHz
NFC	Data	13.56 MHz
UWB	Data	6489.6 - 7987.2 MHz
WPT	N/A	110 kHz - 145 kHz

This device uses the Qualcomm® Smart Transmit Plus, EFS v24 feature to control and manage transmitting power in real time and to ensure the time-averaged RF exposure is in compliance with the FCC requirement at all times for 2G/3G/4G/5G WWAN and WLAN/BT/NTN operations. Additionally, this device supports NFC/WPT technologies, but the output power of these modems is not controlled by the Smart Transmit algorithm.

FCC ID: A3LSMS948U	COMPLIANCE SUMMARY REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-05.A3L	DUT Type: Portable Handset	Page 9 of 10

REV 1.1
04/11/2022

Unless otherwise specified, no part of this report may be reproduced or utilized in any part, form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from Element. If you have any questions or have an enquiry about obtaining additional rights to this report or assembly of contents thereof, please contact CT.Info@Element.com.

4 COMPLIANCE SUMMARY

4.1 RF Exposure Compliance Summary

All transmission scenarios that the DUT supports comply with FCC time-averaged RF exposure requirements, as shown in Table 4-1.

Table 4-1
Reported RF Exposure Levels

	RFx Evaluation	Power Level	FCC Limit	<i>Reported</i> RF Exposure Level	Test Report
SAR (W/kg)	Standalone 1g SAR	P_{limit}	1.6	1.19	FCC SAR Evaluation Report (Part 1)
	Standalone 10g SAR	P_{limit}	4.0	2.74	
	Simultaneous Tx 1g SAR	P_{limit}	1.6	1.59	
	Simultaneous Tx 10g SAR	P_{limit}	4.0	2.34	
psPD (mW/cm ²)	4cm ² psPD	<i>input.power.limit</i>	1.0	0.933	FCC PD Evaluation Report (Part 1)
TER	Total Exposure Ratio	P_{limit} for SAR, <i>input.power.limit</i> for psPD	1.0	0.994	FCC SAR Evaluation Report (Part 1)

FCC ID: A3LSMS948U	COMPLIANCE SUMMARY REPORT	Approved by: Technical Manager
Document S/N: 1M2508250078-05.A3L	DUT Type: Portable Handset	Page 10 of 10

REV 1.1
04/11/2022