

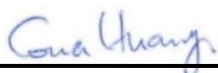
RF Exposure Report

(Part 0: SAR Char Evaluation)

FCC ID : QYLFN990F12
Equipment : WWAN Module
Model Name : FN990A28
Applicant : Getac Technology Corporation.
5F., Building A, No. 209, Sec.1, Nangang Rd., Nangang Dist.,
Taipei City 115018, Taiwan, R.O.C.
Standard : FCC 47 CFR Part 2 (2.1093)

We, SPORTON INTERNATIONAL INC., would like to declare that the tested sample has been evaluated in accordance with the test procedures and has been in compliance with the applicable technical standards.

The test results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC., the test report shall not be reproduced except in full.



Approved by: Cona Huang / Deputy Manager

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History of this test report

Report No.	Version	Description	Issued Date
FA552403A	01	Initial issue of report	Jul. 22, 2025

1. Introduction

The RF exposure limit is defined based on time-averaged RF exposure. The product implements Qualcomm Smart Transmit feature which controls the instantaneous transmitting power for WWAN transmitter to ensure the product in compliance with RF exposure limit over a defined time window, for SAR (transmit frequency $\leq 6\text{GHz}$) to control and manage transmitting power in real time and to ensure at all times the time-averaged RF exposure is compliant to the regulation requirement. Cannot operate without SAR characterization at the device level, beforehand.

This report describes the procedures for the SAR char and the parameters obtained from SAR characterization (referred to as SAR char respectively) will be used as input for Smart Transmit. Both SAR char will be entered via the Embedded File System (EFS) to enable the Smart Transmit Feature.

Terminologies in this report

Plimit	The time-averaged RF power which corresponds to SAR_design_target.
Pmax	Maximum target power level
SAR_design_target:	The design target for SAR compliance. It should be less than regulatory power density limit to account for all device design related uncertainties.
SAR char	Plimit for all the technologies/bands for all applicable DSI

Test Lab Information

Test Firm Name	Sporton International Inc. Wensan Laboratory
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2. SAR Characterization

SAR char must be generated to cover all radio configurations and usage scenarios that the wireless device supports for operating at 6 GHz or below. It will then be used as input for Smart Transmit to control and manage RF exposure for $f < 6\text{GHz}$.

2.1 SAR design target and uncertainty

<SAR design target and uncertainty>

The detail SAR design target relate to each exposure conditions pls refer to operation description

To account for total uncertainty, SAR_design_target should be determined as:

Band	Antenna	1g SAR design target (W/kg)	duty cycle	Power tolerance (dB)
WCDMA II_Ant Main	Main	0.631	100.00%	1
WCDMA IV_Ant Main	Main	0.631	100.00%	1
WCDMA V_Ant Main	Main	0.631	100.00%	1
LTE Band 7_Ant Main	Main	0.631	100.00%	1
LTE Band 12/17_Ant Main	Main	0.631	100.00%	1
LTE Band 13_Ant Main	Main	0.631	100.00%	1
LTE Band 14_Ant Main	Main	0.631	100.00%	1
LTE Band 25/2_Ant Main	Main	0.631	100.00%	1
LTE Band 26/5_Ant Main	Main	0.631	100.00%	1
LTE Band 41/38_Ant Main	Main	0.631	63.30%	1
LTE Band 41_HPUE_Ant Main	Main	0.631	43.30%	1
LTE Band 48_Ant MIMO 1	MIMO1	0.631	63.30%	1
LTE Band 66/4_Ant Main	Main	0.631	100.00%	1
LTE Band 71_Ant Main	Main	0.631	100.00%	1
FR1 n7_Ant Main	Main	0.631	100.00%	1
FR1 n12_Ant Main	Main	0.631	100.00%	1
FR1 n13_Ant Main	Main	0.631	100.00%	1
FR1 n14_Ant Main	Main	0.631	100.00%	1
FR1 n25/2_Ant Main	Main	0.631	100.00%	1
FR1 n26/5_Ant Main	Main	0.631	100.00%	1
FR1 n41/38_Ant Main	Main	0.631	100.00%	1
FR1 n41_HPUE_Ant Main	Main	0.631	50.00%	1
FR1 n48_Ant MIMO 1	MIMO1	0.631	100.00%	1
FR1 n66_Ant Main	Main	0.631	100.00%	1
FR1 n71_Ant Main	Main	0.631	100.00%	1
FR1 n77_Ant MIMO 1	MIMO1	0.631	100.00%	1
FR1 n77_HPUE_Ant MIMO 1	MIMO1	0.631	50.00%	1
LTE Band 7_Ant Aux	Aux	0.953	100.00%	1
LTE Band 25/2_Ant Aux	Aux	0.953	100.00%	1
LTE Band 41/38_Ant Aux	Aux	0.953	63.30%	1
LTE Band 41_HPUE_Ant Aux	Aux	0.953	43.30%	1
LTE Band 42_Ant MIMO 2	MIMO2	0.953	63.30%	1
LTE Band 48/43_Ant MIMO 2	MIMO2	0.953	63.30%	1
LTE Band 66/4_Ant Aux	Aux	0.953	100.00%	1
FR1 n7_Ant Aux	Aux	0.953	100.00%	1
FR1 n25/2_Ant Aux	Aux	0.953	100.00%	1
FR1 n41/38_Ant Aux	Aux	0.953	100.00%	1
FR1 n41_HPUE_Ant Aux	Aux	0.953	50.00%	1
FR1 n48_Ant MIMO 2	MIMO2	0.953	100.00%	1
FR1 n66_Ant Aux	Aux	0.953	100.00%	1
FR1 n77_Ant MIMO 2	MIMO2	0.953	100.00%	1
FR1 n77_Ant MIMO 2	MIMO2	0.953	50.00%	1

$$SAR_{design_target} < SAR_{regulatory_limit} \times 10^{\frac{-total\ uncertainty}{10}}$$

2.2 SAR Char Table

<P_{limit} for supported technologies and bands (P_{limit} in EFS file)>

*P_{max} is used for the RF tune-up procedure. The maximum allowed output power is equal to P_{max} + device uncertainty.

**All P_{limit} power levels entered in the table correspond to average power levels after accounting for the duty cycle in the case of TDD modulation schemes (e.g., GSM TDD, LTE TDD, and NR TDD).

The maximum allowed output power is P_{limit} + device uncertainty. However, if P_{limit} is higher than P_{max}, the device output power will be limited to P_{max}.

Band	Antenna	duty cycle	P _{limit}	P _{max} (dBm)	Power tolerance (dB)
			Body		
WCDMA II_Ant Main	Main	100.00%	17.1	23.5	1
WCDMA IV_Ant Main	Main	100.00%	17.3	23.5	1
WCDMA V_Ant Main	Main	100.00%	19.4	23.5	1
LTE Band 7_Ant Main	Main	100.00%	14.1	23.0	1
LTE Band 12/17_Ant Main	Main	100.00%	19.9	23.0	1
LTE Band 13_Ant Main	Main	100.00%	19.9	23.0	1
LTE Band 14_Ant Main	Main	100.00%	19.6	23.0	1
LTE Band 25/2_Ant Main	Main	100.00%	16.7	23.0	1
LTE Band 26/5_Ant Main	Main	100.00%	19.0	23.0	1
LTE Band 41/38_Ant Main	Main	63.30%	14.2	21.0	1
LTE Band 41_HPUE_Ant Main	Main	43.30%		21.9	1
LTE Band 48_Ant MIMO 1	MIMO1	63.30%	8.7	20.5	1
LTE Band 66/4_Ant Main	Main	100.00%	17.3	23.0	1
LTE Band 71_Ant Main	Main	100.00%	20.5	23.0	1
FR1 n7_Ant Main	Main	100.00%	14.3	23.5	1
FR1 n12_Ant Main	Main	100.00%	20.5	23.0	1
FR1 n13_Ant Main	Main	100.00%	20.6	23.0	1
FR1 n14_Ant Main	Main	100.00%	20.5	23.0	1
FR1 n25/2_Ant Main	Main	100.00%	17.6	23.5	1
FR1 n26/5_Ant Main	Main	100.00%	19.8	23.0	1
FR1 n41/38_Ant Main	Main	100.00%	13.6	24.0	1
FR1 n41_HPUE_Ant Main	Main	50.00%		23.5	1
FR1 n48_Ant MIMO 1	MIMO1	100.00%	8.5	21.5	1
FR1 n66_Ant Main	Main	100.00%	17.7	23.5	1
FR1 n71_Ant Main	Main	100.00%	21.0	23.5	1
FR1 n77_Ant MIMO 1	MIMO1	100.00%	8.4	23.5	1
FR1 n77_HPUE_Ant MIMO 1	MIMO1	50.00%		23.5	1
LTE Band 7_Ant Aux	Aux	100.00%	16.7	23.0	1
LTE Band 25/2_Ant Aux	Aux	100.00%	16.3	23.0	1
LTE Band 41/38_Ant Aux	Aux	63.30%		21.0	1
LTE Band 41_HPUE_Ant Aux	Aux	43.30%	16.3	21.9	1
LTE Band 42_Ant MIMO 2	MIMO2	63.30%	13.2	19.5	1
LTE Band 48/43_Ant MIMO 2	MIMO2	63.30%	14.1	20.5	1
LTE Band 66/4_Ant Aux	Aux	100.00%	17.8	23.0	1
FR1 n7_Ant Aux	Aux	100.00%	17.0	23.5	1
FR1 n25/2_Ant Aux	Aux	100.00%	18.5	23.5	1
FR1 n41/38_Ant Aux	Aux	100.00%	15.8	24.0	1
FR1 n41_HPUE_Ant Aux	Aux	50.00%		23.5	1
FR1 n48_Ant MIMO 2	MIMO2	100.00%	14.3	21.5	1
FR1 n66_Ant Aux	Aux	100.00%	18.4	23.5	1
FR1 n77_Ant MIMO 2	MIMO2	100.00%	13.1	23.5	1
FR1 n77_Ant MIMO 2	MIMO2	50.00%		23.5	1