

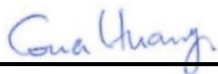
RF Exposure Report

(Part 0: SAR Char Evaluation)

FCC ID : QYLFN990B
Equipment : 5G NR Module
Brand Name : Getac
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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Table of Contents

1. Introduction 4

2. SAR Characterization..... 4

 2.1 SAR design target and uncertainty..... 5

 2.2 SAR Char Table 6



History of this test report

Report No.	Version	Description	Issued Date
FA531705A	01	Initial issue of report	Jun. 25, 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 $\leq$ 6GHz) 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.
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Test Firm Registration Number for FCC	553509
FCC Designation No.	TW1190
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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 $f < 6$ 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)	TDD duty cycle	Power Tolerance (dB)
WCDMA II	Main(Ant 0)	0.95	100.00%	1
WCDMA IV	Main(Ant 0)	0.95	100.00%	1
WCDMA V	Main(Ant 0)	0.95	100.00%	1
LTE Band 7	Main(Ant 0)	0.95	100.00%	1
LTE Band 7	Aux(Ant 2)	0.95	100.00%	1
LTE Band 12/17	Main(Ant 0)	0.95	100.00%	1
LTE Band 13	Main(Ant 0)	0.95	100.00%	1
LTE Band 14	Main(Ant 0)	0.95	100.00%	1
LTE Band 25/2	Main(Ant 0)	0.95	100.00%	1
LTE Band 25/2	Aux(Ant 2)	0.95	100.00%	1
LTE Band 26/5	Main(Ant 0)	0.95	100.00%	1
LTE Band 38	Main(Ant 0)	0.95	63.30%	1
LTE Band 38	Aux(Ant 2)	0.95	63.30%	1
LTE Band 41(PC3)	Main(Ant 0)	0.95	63.30%	1
LTE Band 41(PC2)**	Main(Ant 0)	0.95	43.30%	1
LTE Band 41(PC3)	Aux(Ant 2)	0.95	63.30%	1
LTE Band 41(PC2)**	Aux(Ant 2)	0.95	43.30%	1
LTE Band 42	MIMO2(Ant 3)	0.95	63.30%	1
LTE Band 43	MIMO2(Ant 3)	0.95	63.30%	1
LTE Band 48	MIMO2(Ant 3)	0.95	63.30%	1
LTE Band 48	MIMO1(Ant 1)	0.95	63.30%	1
LTE Band 66/4	Main(Ant 0)	0.95	100.00%	1
LTE Band 71	Main(Ant 0)	0.95	100.00%	1
n5	Main(Ant 0)	0.95	100.00%	1
n7	Main(Ant 0)	0.95	100.00%	1
n7	Aux(Ant 2)	0.95	100.00%	1
n12	Main(Ant 0)	0.95	100.00%	1
n13	Main(Ant 0)	0.95	100.00%	1
n14	Main(Ant 0)	0.95	100.00%	1
n25/2	Main(Ant 0)	0.95	100.00%	1
n25/2	Aux(Ant 2)	0.95	100.00%	1
n26	Main(Ant 0)	0.95	100.00%	1
n41/38 (PC3)	Main(Ant 0)	0.95	100.00%	1
n41(PC2)**	Main(Ant 0)	0.95	50.00%	1
n41/38 (PC3)	Aux(Ant 2)	0.95	100.00%	1
n41 (PC2)**	Aux(Ant 2)	0.95	50.00%	1
n48	MIMO1(Ant 1)	0.95	100.00%	1
n48	MIMO2(Ant 3)	0.95	100.00%	1
n66	Main(Ant 0)	0.95	100.00%	1
n71	Main(Ant 0)	0.95	100.00%	1
n77/n78(PC3)	MIMO1(Ant 1)	0.95	100.00%	1
n77/n78(PC2)**	MIMO1(Ant 1)	0.95	50.00%	1
n77/n78(PC3)	MIMO2(Ant 3)	0.95	100.00%	1
n77/n78(PC2)**	MIMO2(Ant 3)	0.95	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)>

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

**All Plimit 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 Plimit + device uncertainty. However, if Plimit is higher than Pmax, the device output power will be limited to Pmax.

Band	Antenna	TDD duty cycle	Plimit*	Pmax * (dBm)	Power Tolerance (dB)
			Body		
WCDMA II	Main(Ant 0)	100.00%	28.4	23.5	1
WCDMA IV	Main(Ant 0)	100.00%	28.6	23.5	1
WCDMA V	Main(Ant 0)	100.00%	29.1	23.5	1
LTE Band 7	Main(Ant 0)	100.00%	31.4	23.0	1
LTE Band 7	Aux(Ant 2)	100.00%	31.5	23.0	1
LTE Band 12/17	Main(Ant 0)	100.00%	30.4	23.0	1
LTE Band 13	Main(Ant 0)	100.00%	30.7	23.0	1
LTE Band 14	Main(Ant 0)	100.00%	30.1	23.0	1
LTE Band 25/2	Main(Ant 0)	100.00%	28.8	23.0	1
LTE Band 25/2	Aux(Ant 2)	100.00%	29.5	23.0	1
LTE Band 26/5	Main(Ant 0)	100.00%	30.7	23.0	1
LTE Band 38	Main(Ant 0)	63.30%	29.3	21.0	1
LTE Band 38	Aux(Ant 2)	63.30%	30.3	21.0	1
LTE Band 41 (PC3)	Main(Ant 0)	63.30%	29.3	20.5	1
LTE Band 41 (PC2)**	Main(Ant 0)	43.30%		21.9	1
LTE Band 41 (PC3)	Aux(Ant 2)	63.30%	31.0	20.5	1
LTE Band 41 (PC2)**	Aux(Ant 2)	43.30%		21.9	1
LTE Band 42	MIMO2(Ant 3)	63.30%	11.8	19.5	1
LTE Band 43	MIMO2(Ant 3)	63.30%	11.9	19.5	1
LTE Band 48	MIMO1(Ant 1)	63.30%	10.5	19.5	1
LTE Band 48	MIMO2(Ant 3)	63.30%	11.8	19.5	1
LTE Band 66/4	Main(Ant 0)	100.00%	29.7	23.0	1
LTE Band 71	Main(Ant 0)	100.00%	30.6	23.0	1
n5	Main(Ant 0)	100.00%	30.3	23.5	1
n7	Main(Ant 0)	100.00%	30.6	23.0	1
n7	Aux(Ant 2)	100.00%	30.7	23.0	1
n12	Main(Ant 0)	100.00%	30.6	23.0	1
n13	Main(Ant 0)	100.00%	30.7	23.0	1
n14	Main(Ant 0)	100.00%	30.5	23.0	1
n25/2	Main(Ant 0)	100.00%	27.6	23.5	1
n25/2	Aux(Ant 2)	100.00%	29.8	23.5	1
n26	Main(Ant 0)	100.00%	30.3	23.0	1
n41/38 (PC3)	Main(Ant 0)	100.00%	30.3	23.0	1
n41 (PC2)**	Main(Ant 0)	50.00%		23.0	1
n41/38 (PC3)	Aux(Ant 2)	100.00%	28.4	23.0	1
n41 (PC2)**	Aux(Ant 2)	50.00%		23.0	1
n48	MIMO1(Ant 1)	100.00%	11.2	21.5	1
n48	MIMO2(Ant 3)	100.00%	11.2	21.5	1
n66	Main(Ant 0)	100.00%	28.8	23.5	1
n71	Main(Ant 0)	100.00%	31.1	23.5	1
n77/n78 (PC3)	MIMO1(Ant 1)	100.00%	10.7	23.0	1
n77/n78 (PC2)**	MIMO1(Ant 1)	50.00%		23.0	1
n77/n78 (PC3)	MIMO2(Ant 3)	100.00%	11.9	23.0	1
n77/n78 (PC2)**	MIMO2(Ant 3)	50.00%		23.0	1