

# PART 0 SAR TEST REPORT

**Applicant** Honor Device Co., Ltd.

**FCC ID** 2AYGCMTN-NX3

**Product** Smart Phone

**Model** MTN-NX3

**Report No.** EFTA25070279-IE-01-S1

**Issue Date** September 8, 2025

Eurofins TA Technology (Shanghai) Co., Ltd. tested the above equipment in accordance with the requirements in **IEEE 1528-2013, ANSI C95.1: 1992, IEEE C95.1: 1991**. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

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*Approved by: Xu Kai*

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## 1 Test Laboratory

### 1.1 Notes of the Test Report

This report shall not be reproduced in full or partial, without the written approval of **Eurofins TA Technology (Shanghai) Co., Ltd.** The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. Measurement Uncertainties were not taken into account and are published for informational purposes only. This report is written to support regulatory compliance of the applicable standards stated above.

### 1.2 Test Facility

#### FCC (Designation number: CN1179, Test Firm Registration Number: 446626)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed on the US Federal Communications Commission list of test facilities recognized to perform measurements.

#### A2LA (Certificate Number: 3857.01)

Eurofins TA Technology (Shanghai) Co., Ltd. has been listed by American Association for Laboratory Accreditation to perform measurement.

### 1.3 Testing Location

Company: Eurofins TA Technology (Shanghai) Co., Ltd.  
Address: Building 3, No.145, Jintang Rd, Pudong Shanghai, P.R.China  
City: Shanghai  
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### 1.4 Laboratory Environment

Temperature	Min. = 18°C, Max. = 25 °C
Relative humidity	Min. = 30%, Max. = 70%
Ground system resistance	< 0.5 Ω
Ambient noise is checked and found very low and in compliance with requirement of standards Reflection of surrounding objects is minimized and in compliance with requirement of standards	

## 2 Description of Equipment Under Test

### Client Information

Applicant	Honor Device Co., Ltd.
Applicant address	Shum Yip Sky Park, No. 8089, Hongli West Road, Shenzhen, China
Manufacturer	Honor Device Co., Ltd.
Manufacturer address	Shum Yip Sky Park, No. 8089, Hongli West Road, Shenzhen, China

### General Technologies

Application Purpose	Original Grant		
EUT Stage	Identical Prototype		
Model	MTN-NX3		
IMEI	Battery1	867306080009171; 867306080011466	
	Battery2	867306080010716; 867306080013009	
	Configuration 2	867306080017208; 867306080018123	
	Configuration 3	867306080017364; 867306080018289	
Hardware Version	HN2MTNM		
Software Version	9.0.0.102(C900E100R1P1)		
Antenna Type	Internal Antenna		
Device Class	B		
Wi-Fi Hotspot	Wi-Fi 2.4G Wi-Fi 5G U-NII-1&U-NII-3		
Power Class	GSM 850: 4 GSM 1900: 1 WCDMA Band II/IV/V: 3 LTE FDD 2/4/5/7/12/13/17/26/66: 3 LTE TDD 38: 3 LTE TDD 41: 2 NR n2/n7/n38/n66: 3 NR n41/n78: 2		
	GSM 850: level 5 GSM 1900: level 0 WCDMA Band II/IV/V: all up bits LTE FDD 2/4/5/7/12/13/17/26/66: max power LTE TDD 38/41: max power NR n2/n7/n38/41/n66/n78: max power		
<b>EUT Accessory</b>			
<b>Accessory</b>	<b>Model</b>	<b>Manufacture</b>	<b>No.</b>
Battery	HB5668A0EIW	Desay	1
	HB5668A0EIW	Sunwoda	2

Note: The EUT is sent from the applicant to TA and the information of the EUT is declared by the applicant.

## Wireless Technology and Frequency Range

Wireless Technology		Modulation	Operating mode	Tx (MHz)		
GSM	850	Voice(GMSK) GPRS(GMSK) EGPRS(GMSK,8PSK)	<input type="checkbox"/> Multi-slot Class:8-1UP <input type="checkbox"/> Multi-slot Class:10-2UP <input checked="" type="checkbox"/> Multi-slot Class:12-4UP <input type="checkbox"/> Multi-slot Class:33-4UP	824 ~ 849		
	1900			1850 ~ 1910		
Does this device support DTM (Dual Transfer Mode)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
WCDMA	Band II	QPSK	HSDPA UE Category:10 HSUPA UE Category:6	1850 ~ 1910		
	Band IV			1710 ~ 1755		
	Band V			824 ~ 849		
LTE	FDD 2	QPSK, 16QAM, 64QAM, 256QAM	Rel.15 /Category 12	1850 ~ 1910		
	FDD 4			1710 ~ 1755		
	FDD 5			824 ~ 849		
	FDD 7			2500 ~ 2570		
	FDD 12			699 ~ 716		
	FDD 13			777 ~ 787		
	FDD 17			704 ~ 716		
	FDD 26			814 ~ 849		
	TDD 38			2570 ~ 2620		
	TDD 41			2496 ~ 2690		
	FDD 66			1710 ~ 1780		
Does this device support Carrier Aggregation (CA) <input checked="" type="checkbox"/> Yes downlink only <input type="checkbox"/> No						
Does this device support SV-LTE (1xRTT-LTE)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No						
NR	n2	CP-OFDM: QPSK, 16QAM, 64QAM, 256QAM; DFT-s OFDM: PI/2	Rel.15	1850 ~ 1910		
	n7			2500 ~ 2570		
	n38			2570 ~ 2620		
	n41			2496 ~ 2690		
	n66			1710 ~ 1780		
	n78			3450 ~ 3550		
ENDC	/	DC_2A_n7A; DC_2A_n78A; DC_4A_n38A; DC_4A_n41A; DC_4A_n78A; DC_5A_n7A; DC_5A_n78A; DC_7A_n66A; DC_7A_n78A; DC_38A_n78A; DC_66A_n7A; DC_66A_n78A				
Bluetooth	2.4G	Version 5.2 BR/EDR + LE				
Wi-Fi	2.4G	DSSS, OFDM, OFDMA	802.11b/g/n/ax HT20/HE20	2412 ~ 2462		
		OFDM, OFDMA	802.11n/ax HT40/HE40	2422 ~ 2452		
	5G	OFDM, OFDMA	802.11a HT20/ n HT20/ HT40/ ac VHT20/ VHT40/ VHT80/ ax HE20/ HE40/ HE80	5150 ~ 5350 5470 ~ 5850		
	Does this device support MIMO <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No					
NFC	13.56MHz					

Note:

1. The device incorporates the Smart Transmit (Smart TX) SAR averaging algorithm provided by Qualcomm

for cellular technologies. Smart Transmit controls the Tx power of the cellular based wireless device in real-time to maintain the time-averaged Tx power, and in turn, time-averaged RF exposure, below the predefined time-average power limit characterized for each technology and band.

### 3 Introduction

The Equipment Under Test (EUT) is a smartphone equipped with a Qualcomm modem that supports 2G/3G/4G network technologies and 5G NR Sub-6 GHz technology. Thanks to these modems, the Qualcomm Smart Transmit feature is enabled, which can control and manage transmission power in real time, ensuring that the time-averaged RF exposure always complies with the requirements of the Federal Communications Commission (FCC)

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The compliance test under the static transmission scenario and simultaneous transmission analysis are reported in Part 1 report, while the validation of the time-averaging algorithm and the compliance status of WWAN technologies under dynamic (time-varying) transmission scenarios are described in the Part 2 report.

#### Nomenclature for Part 0 Report

Term	Description
$P_{max}$	The time-averaged RF power which corresponds to SAR_design_target.
$P_{limit}$	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 DS1

## 4 SAR Characterization

### 4.1 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 is further grouped and determined for each or combined exposure scenario.

**DSI and Corresponding Exposure Scenarios**

Scenario	Description
DSI2	Receiver on(Standalone)
DSI4	Receiver off(Standalone)
DSI6	Receiver on(WWAN+WLAN+BT)
DSI8	Receiver on(WWAN+WLAN/BT)
DSI10	Receiver off(WWAN+WLAN+BT)
DSI12	Receiver off(WWAN+WLAN/BT)
DSI14	Hotspot on

### 4.2 SAR Design Target and Uncertainty

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. To account for total uncertainty, SAR\_design\_target should be determined as:

$$\text{SAR\_design\_target} < \text{SARregulatory\_limit} \times 10^{\frac{-\text{total uncertainty}}{10}}$$

Exposure conditions	Trigger Conditions	DSI	SAR design target	W/kg	Remark
Head	Rcv On	2	1g SAR design target	1.03	For GSM & WCDMA & LTE & NR
Head	Rcv On+Wifi5G+BT	6	1g SAR design target	N/A	For GSM & WCDMA & LTE & NR
Head	Rcv On+Wifi2.4G & Rcv On+Wifi5G & Rcv On+BT	8	1g SAR design target	N/A	For GSM & WCDMA & LTE & NR
Body Worn	Rcv Off	4	1g SAR design target	0.90	For GSM & WCDMA & LTE & NR
Body Worn	Rcv Off+Wifi5G+BT	10	1g SAR design target	N/A	For GSM & WCDMA & LTE & NR
Body Worn	Rcv Off+Wifi2.4G & Rcv Off+Wifi5G & Rcv Off+BT	12	1g SAR design target	N/A	For GSM & WCDMA & LTE & NR
hotspot	Hotspot On	14	1g SAR design target	0.89	For GSM & WCDMA & LTE & NR
Product-specific 10g SAR	Rcv Off	4	10g SAR design target	1.83	For GSM & WCDMA & LTE & NR
Product-specific 10g SAR	Rcv Off+Wifi5G+BT	10	10g SAR design target	N/A	For GSM & WCDMA & LTE & NR
Product-specific 10g SAR	Rcv Off+Wifi2.4G & Rcv Off+Wifi5G & Rcv Off+BT	12	10g SAR design target	N/A	For GSM & WCDMA & LTE & NR

Uncertainty category	Uncertainty dB 2/3/4/5G	
	0.5	1
Device to device		
Total uncertainty		

#### 4.3 SAR Char

SAR char must be generated to cover all radio configurations and usage scenarios that the wireless device supports for operating. Plimit is calculated by linearly scaling with the measured SAR at the Ppart0 to correspond to the SAR\_design\_target. When Plimit < Pmax, Ppart0 was used as Plimit in the Smart Transmit EFS. When Plimit >Pmax and Ppart0=Pmax, calculated Pmax was used in the Smart Transmit EFS. All reported SAR obtained from the Ppart0 SAR tests was less than SAR\_Design\_target+ device uncertainty.

Band	Antenna	Head	Body	WWAN +Wifi5G+BT	WWAN +Wifi 2.4G/5G/BT	WWAN +Wifi5G+BT	WWAN +Wifi 2.4G/5G/BT	Hotspot	Pmax (dBm)
		DSI 2	DSI 4	DSI 6	DSI 8	DSI 10	DSI 12		
GSM_B850	0	32.5	32.5	31.0	31.5	31.0	31.5	28.5	32.5
GSM_B1900	0	29.5	29.5	28.0	28.5	28.0	28.5	25.5	29.5
GSM_B1900	2	25.5	29.0	23.5	24.0	24.5	27.0	23.5	29.0
WCDMA_B2	0	22.0	22.0	20.5	21.0	20.5	21.0	20.5	23.5
WCDMA_B2	2	16.0	21.5	14.0	14.5	17.0	19.5	14.0	23.0
WCDMA_B4	0	22.3	22.3	20.8	21.3	20.8	21.3	20.8	23.3
WCDMA_B4	2	18.0	21.8	16.0	16.5	17.3	19.8	16.0	22.8
WCDMA_B5	0	24.0	24.0	24.0	24.0	22.5	23.0	22.5	24.0
LTE_B2	0	22.0	22.0	20.5	21.0	20.5	21.0	20.5	23.5
LTE_B2	2	16.5	22.0	14.5	15.0	17.5	20.0	14.5	23.0
LTE_B4	0	22.5	22.5	21.0	21.5	21.0	21.5	21.0	23.5
LTE_B4	2	18.2	22.0	16.2	16.7	17.5	20.0	16.2	23.0
LTE_B5	0	24.0	24.0	22.5	23.0	22.5	23.0	22.5	24.0
LTE_B7	0	22.0	22.0	20.5	21.0	20.5	21.0	20.5	23.5
LTE_B7	2	16.3	18.3	13.8	14.8	13.8	16.3	13.8	22.8
LTE_B7	4	16.0	20.3	14.0	14.5	15.8	18.3	14.0	23.5
LTE_B12	0	24.0	24.0	22.5	23.0	22.5	23.0	22.5	24.0
LTE_B13	0	24.0	24.0	22.5	23.0	22.5	23.0	22.5	24.0
LTE_B17	0	24.0	24.0	22.5	23.0	22.5	23.0	22.5	24.0
LTE_B26	0	24.0	24.0	22.5	23.0	22.5	23.0	22.5	24.0
LTE_B66	0	22.5	22.5	21.0	21.5	21.0	21.5	21.0	23.5
LTE_B66	2	18.5	22.0	16.5	17.0	17.5	20.0	16.5	23.0
LTE_B38	4	17.5	23.0	15.5	16.0	18.5	21.0	15.5	23.5
LTE_B38	5	18.6	19.6	15.1	17.1	15.1	17.6	15.1	19.6

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LTE_B38	0	21.2	21.2	19.7	20.2	19.7	20.2	19.7	21.2
LTE_B38	2	17.9	20.2	15.7	16.4	15.7	18.2	15.7	20.2
LTE_B41	4	19.3	23.9	17.3	17.8	19.4	21.9	17.3	25.3
LTE_B41	5	19.9	21.4	16.9	18.4	16.9	19.4	16.9	21.4
LTE_B41	0	23.0	23.0	21.5	22.0	21.5	22.0	21.5	23.0
LTE_B41	2	19.7	21.2	16.7	18.2	16.7	19.2	16.7	22.0
NR5G_N2	0	21.5	21.5	20.0	20.5	20.0	20.5	20.0	23.0
NR5G_N2	2	15.7	21.0	13.7	14.2	16.5	19.0	13.7	22.5
NR5G_N7	4	15.7	20.0	13.7	14.2	15.5	18.0	13.7	23.0
NR5G_N7	0	21.2	21.2	19.7	20.2	19.7	20.2	19.7	23.0
NR5G_N7	2	15.8	17.3	12.8	14.3	12.8	15.3	12.8	22.3
NR5G_N66	0	21.8	21.8	20.3	20.8	20.3	20.8	20.3	23.0
NR5G_N66	2	17.0	20.7	15.0	15.5	16.2	18.7	15.0	22.5
NR5G_N38	4	15.8	19.3	13.8	14.3	14.8	17.3	13.8	23.3
NR5G_N38	5	15.9	19.4	13.9	14.4	14.9	17.4	13.9	19.4
NR5G_N38	0	20.2	20.2	18.7	19.2	18.7	19.2	18.7	21.0
NR5G_N38	2	16.0	17.7	13.2	14.5	13.2	15.7	13.2	20.0
NR5G_N41	4	15.8	19.3	13.8	14.3	14.8	17.3	13.8	25.3
NR5G_N41	5	16.4	21.4	14.4	14.9	16.9	19.4	14.4	21.4
NR5G_N41	0	20.5	20.5	19.0	19.5	19.0	19.5	19.0	23.0
NR5G_N41	2	16.0	17.5	13.0	14.5	13.0	15.5	13.0	22.0
NR5G_N78	7	13.5	18.0	11.5	12.0	13.5	16.0	11.5	26.0
NR5G_N78	2	16.5	18.2	13.7	15.0	13.7	16.2	13.7	23.5
NR5G_N78	6	17.0	20.3	15.0	15.5	15.8	18.3	15.0	25.0
NR5G_N78	12	15.2	17.7	13.2	13.7	13.2	15.7	13.2	23.2

## 5 Measurement Uncertainty

Per KDB 865664 D01 SAR Measurement 100 MHz to 6 GHz, when the highest measured 1-g SAR within a frequency band is < 1.5 W/kg and the measured 10-g SAR within a frequency band is < 3.75 W/kg. The expanded SAR measurement uncertainty must be  $\leq 30\%$ , for a confidence interval of  $k = 2$ . If these conditions are met, extensive SAR measurement uncertainty analysis described in IEEE Std 1528-2013 is not required in SAR reports submitted for equipment approval.

Therefore, the measurement uncertainty is not required.