



# RFEXPOSURE EXEMPTREPORT

**APPLICANT** : NiceRF Wireless Technology LTD.  
**PRODUCT NAME** : ASK Transmitter Module  
**MODEL NAME** : STX883Pro  
**BRAND NAME** : NICERF  
**FCC ID** : 2AD66-STX883PRO  
**STANDARD(S)** : FCC 47CFR Part 2(2.1091)  
**RECEIPT DATE** : 2021-05-14  
**TEST DATE** : 2021-05-20 to 2021-07-05  
**ISSUE DATE** : 2021-08-03



Edited by:

*Peng Mi*

Peng Mi (Rapporteur)

Approved by:

*Shen Junsheng*

Shen Junsheng (Supervisor)

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<b>Change History</b>		
<b>Version</b>	<b>Date</b>	<b>Reason for change</b>
1.0	2021-08-03	First edition



# 1. Technical Information

**Note:** Provide by applicant.

## 1.1 Applicant and Manufacturer Information

<b>Applicant:</b>	NiceRF Wireless Technology LTD.
<b>Applicant Address:</b>	309-314, Bldg A, Hongdu business building, Xin'an street, Zone 43, Baoan Dist, Shenzhen 518101, China
<b>Manufacturer:</b>	NiceRF Wireless Technology LTD.
<b>Manufacturer Address:</b>	309-314, Bldg A, Hongdu business building, Xin'an street, Zone 43, Baoan Dist, Shenzhen 518101, China

## 1.2 Equipment Under Test (EUT) Description

<b>Product Name:</b>	ASK Transmitter Module
<b>Sample No.:</b>	2#
<b>Hardware Version:</b>	v1.0
<b>Software Version:</b>	v1.0
<b>Modulation Type:</b>	GFSK
<b>Operating Frequency Range:</b>	433.92MHz
<b>Antenna Type:</b>	ANT1: Gold Plated Spring Antenna
	ANT2: Copper Spring Antenna
	ANT3: Wire Antenna
<b>Antenna Gain:</b>	ANT1: 2.15dBi
	ANT2: 2.15dBi
	ANT3: 2.15dBi



### 1.3 Applied Reference Documents

Leading reference documents for testing:

Identity	Document Title	Method determination /Remark
FCC 47CFR Part 2(2.1091)	Radio Frequency Radiation Exposure Assessment: mobile devices	No deviation
KDB 447498 D01v06	General RF Exposure Guidance	No deviation
<p><b>Note 1:</b> Additions to, deviation, or exclusions from the method shall be judged in the "method determination" column of add, deviate or exclude from the specific method shall be explained in the "Remark" of the above table.</p> <p><b>Note 2:</b> When the test result is a critical value, we will use the measurement uncertainty give the judgment result based on the 95% confidence intervals.</p>		



## 2. RF Output Power

### <433MHz Mode >

Frequency(MHz)	Max. Emission E(dB $\mu$ V/m)	Max. Emission (W)	Time-averaging EIRP (mW)
433.92MHz <sup>Note2</sup>	77.45	0.0075	0.0167

**Note 1:** The maximum average emission refers to report (Report No.: SZ21050045W01).

**Note 2:** The result for 433.92MHz approach to certain low power transmitters that has low radiation, therefore the power density of 433.92MHz mode closes to zero.



### 3. RF Exposure Evaluation

➤ **Standalone Transmission SAR Evaluation:**

1. According to KDB 447498 section 4.3.1, the 1-g SAR test exclusion thresholds at test separation Distances  $\leq 50$  mm are determined by:

$$[(\text{max. power of channel, including tune-up tolerance, mW}) / (\text{min. test separation distance, mm})] \cdot [\sqrt{f(\text{GHz})}] \leq 3.0.$$

- f(GHz) is the RF channel transmit frequency in GHz
- Power and distance are rounded to the nearest mW and mm before calculation
- The result is rounded to one decimal place for comparison

2. Standalone SAR measurement is not required for the EIRP is less than the exempt condition according to FCC KDB 447498 D01v06 4.3.2).

➤ **Simultaneous SAR Evaluation:**

This device only incorporates one 433.92MHz transmitter, therefore simultaneous SAR evaluation is not required.



# Annex A Testing Laboratory Information

## 1. Identification of the Responsible Testing Laboratory

<b>Laboratory Name:</b>	Shenzhen Morlab Communications Technology Co., Ltd.
<b>Laboratory Address:</b>	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China
<b>Telephone:</b>	+86 755 36698555
<b>Facsimile:</b>	+86 755 36698525

## 2. Identification of the Responsible Testing Location

<b>Name:</b>	Shenzhen Morlab Communications Technology Co., Ltd.
<b>Address:</b>	FL.3, Building A, FeiYang Science Park, No.8 LongChang Road, Block 67, BaoAn District, ShenZhen, GuangDong Province, P. R. China

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