RF Exposure Report

Report No.:	SABCKS-WTW-P21010667
FCC ID:	2AAAS-CC06
Test Model:	EG91-NAX
Received Date:	Jan. 27, 2021
Test Date:	Feb. 08, 2021
Issued Date:	Feb. 20, 2021
Applicant:	Vivint, Inc.
Address:	4931 N. 300 W. Provo, UT 84604 USA
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Hsin Chu Laboratory
Lab Address:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
Test Location:	E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300, Taiwan
FCC Registration / Designation Number:	723255 / TW2022

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
SABCKS-WTW-P21010667	Original release.	Feb. 20, 2021

1 Certificate of Conformity

Product:	LTE Module
Brand:	Vivint, Inc.
Test Model:	EG91-NAX
Sample Status:	Engineering sample
Applicant:	Vivint, Inc.
Test Date:	Feb. 08, 2021
Standards:	FCC Part 2 (Section 2.1091) KDB 447498 D01 General RF Exposure Guidance v06 IEEE C95.3 -2002

The above equipment has been tested by **Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch**, and found compliance with the requirement of the above standards. The test record, data evaluation & Equipment Under Test (EUT) configurations represented herein are true and accurate accounts of the measurements of the sample's EMC characteristics under the conditions specified in this report.

Prepared by : Vivian Huang , **Date:** Feb. 20, 2021

Vivian Huang / Specialist

Approved by : , **Date:** Feb. 20, 2021

Clark Lin / Technical Manager

2 RF Exposure

2.1 Limits for Maximum Permissible Exposure (MPE)

2 Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm^2)	Average Time (minutes)
Limits For General Population / Uncontrolled Exposure				
0.3-1.34	614	1.63	(100)*	30
1.34-30	824/f	2.19/f	($180/f^2$)*	30
30-300	27.5	0.073	0.2	30
300-1500	…	…	f/1500	30
1500-100,000	…	…	1.0	30

f = Frequency in MHz ; *Plane-wave equivalent power density

2.1 MPE Calculation Formula

$Pd = (Pout*G) / (4*pi*r^2)$

where

Pd = power density in mW/cm^2

Pout = output power to antenna in mW

G = gain of antenna in linear scale

Pi = 3.1416

R = distance between observation point and center of the radiator in cm

2.2 Classification

The antenna of this product, under normal use condition, is at least 20 cm away from the body of the user. So, this device is classified as **Mobile Device**.

2.3 Antenna Gain

For WWAN						
Antenna No.	Band	Model	Freq. Range	Antenna Net Gain (dBi)	Antenna Type	Connector Type
1	WNC	48XKAB13	Band 2 (1850-1910 MHz)	1.38	PIFA	none (like spring)
			Band 4 (1710-1755 MHz)	1.57		
			Band 5 (824-849 MHz)	0.26		
			Band 12 (699-716 MHz)	0.14		
			Band 13 (777-787 MHz)	0.57		

*The above Antenna information is declared by manufacturer and for more detailed features description, please refer to the manufacturer's specifications, the laboratory shall not be held responsible.

2.4 Calculation Result

Operation Mode	Evaluation Frequency (MHz)	Max.Conducted Power		Directional Gain (dBi)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
		(mW)	(dBm)				
WCDMA B2	1850-1910	293.089	24.67	0.00	20	0.05831	1
WCDMA B4	1710-1755	325.837	25.13	0.00	20	0.06482	1
WCDMA B5	824-849	211.349	23.25	0.00	20	0.04205	0.54933
LTE B2	1850-1910	380.198	25.80	0.00	20	0.07564	1
LTE B4	1710-1755	381.066	25.81	0.00	20	0.07581	1
LTE B5	824-849	169.824	22.30	0.00	20	0.03379	0.54933
LTE B12	699-716	161.808	22.09	0.00	20	0.03219	0.46533
LTE B13	777-787	159.588	22.03	0.00	20	0.03175	0.518

* Limit of Power Density = f/1500 (For frequency below 1500MHz)

Note:

1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.

--- END ---