RF Exposure Report

Project Number: 4997926 **Proposal Number:** SUW-202207003065

Report Number: 4997926EMC03 **Revision Level:** 1

Client: Vanu Inc.

Equipment Under Test: Anywave LTE BTS

Model Name: Anywave

Model Number: VA60003-0001

FCC ID: RD6-VA60003-0001

Applicable Standards: 47 CFR §§ 2.1091

FCC KDB 447498 D01 General RF Exposure Guidance v06

FCC OET Bulletin 65

Report issued on: 13 February 2023

Result: Compliant

FOR THE SCOPE OF ACCREDITATION UNDER CERTIFICATE NUMBER: 3212.01
This report must not be used by the client to claim product certification, approval, or endorsement by A2LA, NIST, or any agency of the Federal Government.

Prepared by: Andrew Bluhm
Andrew Bluhm, Jr RF/EMC Engineer

Reviewed by: Martin Taylor
Martin Taylor, Sr RF/EMC Project Engineer

TABLE OF CONTENTS

1 General Information

1.1 *Client Information*

Name:	Vanu Inc.
Address:	81 Hartwell Ave Suite 200
City, State, Zip, Country:	Lexington, MA 02421

1.2 *Test Laboratory*

Name:	SGS North America, Inc.
Address:	620 Old Peachtree Road NW, Suite 100
City, State, Zip, Country:	Suwanee, GA 30024, USA
Accrediting Body:	A2LA
Type of lab:	Testing Laboratory
Certificate Number:	3212.01

1.3 *General Information of EUT*

Type of Product:	Anywave LTE BTS
Model Number:	VA60003-0001
Serial Number:	194216006
Frequency Ranges:	1930 – 1990 MHz (LTE Band 2 Downlink) 2110 – 2155 MHz (LTE Band 4 Downlink) 869 – 894 MHz (LTE Band 5 Downlink)
Max Antenna Gain:	1930 - 1990MHz, 24.4dBi* 2110 – 2155MHz, 25.4dBi* 869 – 894MHz, 23.7dBi*
Max Conducted Output Power:	LTE Band 2: 12.58 dBm LTE Band 4: 11.64 dBm LTE Band 5: 10.93 dBm

**No antenna was provided. This is the maximum gain antenna that can be used with this device.*

1.4 *Operating Modes and Conditions*

Maximum power levels were utilized for all calculations. Simultaneous transmissions are not applicable for this product.

2 RF Exposure

2.1 *Test Results*

Test Description	Product Specific Standard	Test Result
RF Exposure	FCC Part 1.1310	Compliant

2.2 *Test Method*

The formula below calculates power density.

$$S = \frac{PG}{4\pi R^2} \qquad \text{Or} \qquad S = \frac{EIRP}{4\pi R^2}$$

Where;
S = Power density (mW/cm^2)
P = Maximum sourced based average power delivered to antenna port (mW)
G = Maximum power gain of the antenna in the direction of interest relative to an isotropic radiator (dBi)
R = Distance between by-stander and antenna (cm)
EIRP = Equivalent (or effective) isotropically radiated power

2.3 *Single transmission RF Exposure Levels (mW/cm^2)*

Band of Operation		Conducted Power w/tolerance	Antenna Gain	Cable Loss	Average EIRP		Distance (R)	Power Density $EIRP_{Avg}/(4\pi R^2)$	FCC	% of Limit	Verdict
Type	MHz	dBm			dBm	mW	cm	mW/cm^2	mW/cm^2		
LTE Band 2	1930-1990	12.6	24.4	0.0	37.0	5023	20	0.999	1.00	100%	Pass
LTE Band 4	2110-2155	11.6	25.4	0.0	37.0	5012	20	0.997	1.00	100%	Pass
LTE Band 5	869-894	10.9	23.7	0.0	34.6	2904	20	0.578	0.58	100%	Pass

3 Revision History

Revision Level	Description of changes	Revision Date
0	Initial Release	12 January 2023
1	Added FCC ID on title page	13 February 2023