

RF Exposure Report

Report No.: SA160225C21A

FCC ID: XIA-NRB51

Test Model: NRB-51

Received Date: Feb. 18, 2016

Test Date: Feb. 22 ~ Feb. 23, 2016

Issued Date: Feb. 26, 2016

Applicant: NetComm Wireless Limited

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Issued By: Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

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Release Control Record

Issue No.	Description	Date Issued
SA160225C21A	Original release	Feb. 26, 2016

1 Certificate of Conformity

Product: Outdoor LTE Router

Brand: Netcomm

Test Model: NRB-51

Sample Status: Engineering sample

Applicant: NetComm Wireless Limited

Test Date: Feb. 22 ~ Feb. 23, 2016


Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06, section 7

IEEE C95.1

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.

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Date:

Feb. 26, 2016

Approved by :


Ken Liu / Senior Manager

Date:

Feb. 26, 2016

2 RF Exposure

2.1 Limits for Maximum Permissible Exposure (MPE)

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				
300-1500	F/1500	30
1500-100,000	1.0	30

F = Frequency in MHz

2.2 MPE Calculation Formula

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

where

Pd = power density in mW/cm²

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

2.3 Classification

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

3 Calculation Result of Maximum Conducted Power

FREQUENCY BAND (MHz)	EIRP (dBm)	DISTANCE (cm)	POWER DENSITY (mW/cm ²)	LIMIT (mW/cm ²)
LTE Band 2 (Channel Bandwidth 1.4MHz)	30.7	20	0.234	1
LTE Band 2 (Channel Bandwidth 3MHz)	30.4	20	0.218	1
LTE Band 2 (Channel Bandwidth 5MHz)	29.7	20	0.186	1
LTE Band 2 (Channel Bandwidth 10MHz)	29.5	20	0.177	1
LTE Band 2 (Channel Bandwidth 15MHz)	30.4	20	0.218	1
LTE Band 2 (Channel Bandwidth 20MHz)	29.5	20	0.177	1
LTE Band 30 (Channel Bandwidth 5MHz)	27.5	20	0.112	1
LTE Band 30 (Channel Bandwidth 10MHz)	28.8	20	0.151	1

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