

RF Exposure Report

Report No.: SA160725C16

FCC ID: XIA-NRB51B

Test Model: NRB-51

Received Date: Feb. 18, 2016

Test Date: Aug. 02 ~ Aug. 09, 2016

Issued Date: Aug. 11, 2016

Applicant: NetComm Wireless Limited

Address: Level 2, 18-20 Orion Road, Lane Cove, NSW 2066, Sydney Australia

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

Lab Address: No. 47-2, 14th Ling, Chia Pau Vil., Lin Kou Dist., New Taipei City, Taiwan

Test Location: No. 19, Hwa Ya 2nd Rd., Wen Hwa Vil., Kwei Shan Dist., Taoyuan City
33383, TAIWAN (R.O.C.)



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Release Control Record

Issue No.	Description	Date Issued
SA160725C16	Original release	Aug. 11, 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: Aug. 02 ~ Aug. 09, 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.


Prepared by :


Pettie Chen / Senior Specialist

Date:

Aug. 11, 2016

Approved by :


Ken Liu / Senior Manager

Date:

Aug. 11, 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

$$P_d = (P_{out} * G) / (4 * \pi * r^2)$$

where

P_d = power density in mW/cm²

P_{out} = output power to antenna in mW

G = gain of antenna in linear scale

π = 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)	31.4	20	0.275	1
LTE Band 2 (Channel Bandwidth 3MHz)	31.4	20	0.275	1
LTE Band 2 (Channel Bandwidth 5MHz)	31.4	20	0.275	1
LTE Band 2 (Channel Bandwidth 10MHz)	31.7	20	0.294	1
LTE Band 2 (Channel Bandwidth 15MHz)	31.8	20	0.301	1
LTE Band 2 (Channel Bandwidth 20MHz)	32.0	20	0.315	1
LTE Band 30 (Channel Bandwidth 5MHz)	28.3	20	0.135	1
LTE Band 30 (Channel Bandwidth 10MHz)	28.5	20	0.141	1

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