

RF Exposure Report

Report No.: SA161208E07A

FCC ID: ZMYDSL2401HN2E1C

Test Model: DSL-2401HN2-E1C

Received Date: Dec. 08, 2016

Test Date: Dec. 19, 2016

Issued Date: Mar. 28, 2017

Applicant: MitraStar Technology Corporation

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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
SA161208E07A	Original release.	Mar. 28, 2017



1 Certificate of Conformity

Product: VDSL IAD

Brand: MitraStar

Test Model: DSL-2401HN2-E1C

Sample Status: ENGINEERING SAMPLE

Applicant: MitraStar Technology Corporation

Test Date: Dec. 19, 2016

Standards: FCC Part 2 (Section 2.1091)

KDB 447498 D01 General RF Exposure Guidance v06

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 : Cindy Hsin , **Date:** Mar. 28, 2017
Cindy Hsin / Specialist

Approved by : May Chen , **Date:** Mar. 28, 2017
May Chen / Manager

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**.

2.4 Antenna Gain Table

Antenna No.	Chain No.	Antenna Gain(dBi)	Frequency range (GHz ~ GHz)	Antenna Type	Connector Type	Cable Length (mm)
1	Chain 0	2.46	2.4~2.4835	Dipole	NA	177.7
2	Chain 1	2.36	2.4~2.4835		NA	42.7

3 Calculation Result of Conducted Power

Frequency (MHz)	Conducted Power (mW)	Directional Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)
2412-2462	575.232	5.42	20	0.39863	1

NOTE:

$$\text{Directional gain} = 10 \log[(10^{G1/20} + 10^{G2/20})^2 / 2] = 5.42\text{dBi}$$

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