

RF Exposure Report

Report No.: SA170120E10E

FCC ID: ZMYGPT-2741GNAC

Test Model: GPT-2741GNAC

Received Date: Feb. 16, 2017

Test Date: Feb. 25, 2017

Issued Date: Dec. 10, 2019

Applicant: MitraStar Technology Corporation

Address: No. 6, Innovation Rd II, Hsinchu Science Park, Hsinchu 30076, Taiwan

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

Hsin Chu Laboratory

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Taiwan.

Test Location: E-2, No.1, Li Hsin 1st Road, Hsinchu Science Park, Hsinchu City 300,

Taiwan.

FCC Registration / Designation Number:

723255 / TW2022

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Reference No.: 190916E03



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Release Control Record

Issue No.	Description	Date Issued
SA170120E10E	Original release.	Dec. 10, 2019

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Report No.: SA170120E10E Reference No.: 190916E03



1 **Certificate of Conformity**

Product: Fiber Optic access equipment

Brand: MitraStar

Test Model: GPT-2741GNAC

Sample Status: ENGINEERING SAMPLE

Applicant: MitraStar Technology Corporation

Test Date: Feb. 25, 2017

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 / Specialist Dec. 10, 2019

Dec. 10, 2019 Approved by : Date:

Clark Lin / Technical Manager



2 RF Exposure

2.1 Limits for Maximum Permissible Exposure (MPE)

Frequency Range Electric Field (MHz) Strength (V/m)		Magnetic Field Strength (A/m)	Power Density (mW/cm²)	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

Transmitter Circuit	Brand	Model	Antenna Gain(dBi) Including cable loss	Frequency range	Antenna Type	Connecter Type	Cable Length
Chain (0)	HONGBO	290-10434	2.5	2.4~2.4835GHz	Dipole	NA	80mm
Chain (1)	HONGBO	290-10434	2.98	2.4~2.4835GHz	Dipole	NA	80mm

Note:

1. For 802.11b/g mode will select Max Gain for the final test.



3 Calculation Result of Conducted Power

All test data was copied from the original test report (Report No.: SA170120E10A)

Frequency Band (MHz)	Max Power (mW)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm²)	Limit (mW/cm²)
2412-2462	874.039	5.75	20	0.65352	1

Note: Directional gain = $10 \log[(10^{G0/20} + 10^{G1/20})^2 / 2] = 5.75 dBi$

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