RF Exposure Report

Report No.:	SABHKI-WTW-P21120244
FCC ID:	NKRUMC-MT2731CBN
Test Model:	UMC-MT2731CBN
Received Date:	Nov. 01, 2021
Test Date:	Jan. 17 ~ Feb. 24, 2022
Issued Date:	Jun. 09, 2022
Applicant:	Wistron NeWeb Corporation
Address:	20 Park Ave. II, Hsinchu Science Park,Hsinchu 308, Taiwan
Issued By:	Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch Lin Kou Laboratories
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
FCC Registration / Designation Number:	788550 / TW0003

Testing Laboratory
2021

Table of Contents

Release Control Record

Issue No.	Description	Date Issued
SABHKI-WTW-P21120244	Original release	Jun. 09, 2022

1 Certificate of Conformity

Product:	Cellular module
Brand:	WNC
Test Model:	UMC-MT2731CBN
Sample Status:	Engineering sample
Applicant:	Wistron NeWeb Corporation
Test Date:	Jan. 17 ~ Feb. 24, 2022
Standards:	FCC Part 2 (Section 2.1091)
References Test Guidance:	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 RF characteristics under the conditions specified in this report.

Prepared by : Celine Chou , **Date:** Jun. 09, 2022

Celine Chou / Senior Specialist

Approved by : Jeremy Lin , **Date:** Jun. 09, 2022

Jeremy Lin / Project Engineer

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/cm^2
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

Mode	Max ERP Power (dBm)	Max EIRP Power (dBm)	Distance (cm)	Power Density (mW/cm^2)	Limit (mW/cm^2)
GPRS 850	30.65	32.80	20	0.379	0.549
GPRS 1900	-	30.41	20	0.219	1.000
LTE Band 2	-	24.84	20	0.061	1.000
LTE Band 4	-	24.45	20	0.055	1.000
LTE Band 5	23.11	25.26	20	0.067	0.549
LTE Band 7	-	24.94	20	0.062	1.000
LTE Band 12	23.18	25.33	20	0.068	0.466
LTE Band 14	23.32	25.47	20	0.070	0.527
LTE Band 17	23.19	25.34	20	0.068	0.471
LTE Band 25	-	24.73	20	0.059	1.000
LTE Band 26	23.25	25.40	20	0.069	0.543
LTE Band 66	-	24.52	20	0.056	1.000

Note:
1. Determining compliance based on the results of the compliance measurement, not taking into account measurement instrumentation uncertainty.
2. EIRP = ERP + 2.15dB

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