



EMF TEST REPORT

Product Name: Vehicular Communicator

Model Number: MX1, MX1A, MX1C, MX1D, MX1E, MX1G, MX1H, MX1L, MX1M, MX1P, MX1S, MX1U, MX1X

FCC ID: 2BBDV-MX1

Issued For : Shenzhen Lynknex Communications Co., Ltd.
Room 101,103 Building A5, Hangcheng Innovative Park,
Bao'an District, Shenzhen, China

Issued By : Shenzhen LGT Test Service Co., Ltd.
Room 205, Building 13, Zone B, Zhenxiong Industrial Park,
No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan
District, Shenzhen, Guangdong, China

Report Number: LGT26A074HA01

Sample Received Date: Jan. 13, 2026

Date of Test: Jan. 13, 2026 ~ Feb. 03, 2026

Date of Issue: Feb. 03, 2026

The test report is effective only with both signature and specialized stamp. This report shall not be reproduced except in full without the written approval of the Laboratory. The results in this report only apply to the tested sample.



TEST REPORT CERTIFICATION

Applicant: Shenzhen Lynknex Communications Co., Ltd.

Address: Room 101,103 Building A5, Hangcheng Innovative Park, Bao'an District, Shenzhen, China

Manufacturer: Shenzhen Lynknex Communications Co., Ltd.

Address: Room 101,103 Building A5, Hangcheng Innovative Park, Bao'an District, Shenzhen, China

Product Name: Vehicular Communicator

Trademark: LYKNEX

Model Number: MX1, MX1A, MX1C, MX1D, MX1E, MX1G, MX1H, MX1L, MX1M, MX1P, MX1S, MX1U, MX1X

Sample Status: Normal

APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC 47 CFR §2.1091 KDB 447498 D01 General RF Exposure Guidance v06	PASS

Prepared by:

Zane Shan

Zane Shan
Engineer

Approved by:

Vita Li

Vita Li
Technical Director





TABLE OF CONTENTS

1 . GENERAL INFORMATION	5
1.1 GENERAL DESCRIPTION OF THE EUT	5
1.2 TEST LABORATORY	6
2 . FCC 47CFR §2.1091 REQUIREMENT	7
2.1 TEST STANDARDS	7
2.2 LIMIT	7
2.3 EUT OPERATION CONDITION	8
2.4 CLASSIFICATION	8
2.5 TEST RESULT	9



Revision History

Rev.	Issue Date	Revisions
00	Feb. 03, 2026	Initial Issue



1. GENERAL INFORMATION

1.1 GENERAL DESCRIPTION OF THE EUT

Product Name:	Vehicular Communicator	
Test Model Number:	MX1	
Series Number:	MX1A, MX1C, MX1D, MX1E, MX1G, MX1H, MX1L, MX1M, MX1P, MX1S, MX1U, MX1X	
Model Difference:	Depending on the customers in different countries or regions, the product models will be named differently to distinguish them.	
Frequency Bands:	Bluetooth	2402-2480MHz
	2.4G WLAN	802.11b/g/n(20MHz): 2412~2462MHz 802.11n(40MHz):2422~2452MHz
	5G WLAN	IEEE 802.11a/n(HT20)/ac(VHT20): 5.180GHz-5.240GHz IEEE 802.11n(HT40)/ac(VHT40): 5.190GHz-5.230GHz IEEE 802.11ac(VHT80): 5.210GHz IEEE 802.11a/n(HT20)/ac(VHT20): 5.260GHz-5.320GHz IEEE 802.11 n(HT40)/ac(VHT40): 5.270GHz-5.310GHz IEEE 802.11ac(VHT80): 5.290GHz IEEE 802.11a/n(HT20)/ac(VHT20): 5.500GHz-5.700GHz IEEE 802.11 n(HT40)/ac(VHT40): 5.510GHz-5.670GHz IEEE 802.11ac(VHT80): 5.530GHz-5.610GHz IEEE 802.11a/n(HT20)/ac(VHT20): 5.745GHz-5.825GHz IEEE 802.11a/n(HT40)/ac(VHT40): 5.755GHz-5.795GHz IEEE 802.11ac(VHT80): 5.775GHz
	GSM	850: 824 MHz ~ 849MHz 1900: 1850 MHz ~ 1910MHz
	WCDMA	Band V: 824 MHz ~ 849 MHz Band II: 1850 MHz ~ 1910 MHz Band IV: 1710 MHz ~ 1755 MHz
	LTE	LTE Band 2:1850~1910MHz LTE Band 4:1710~1755MHz LTE Band 5: 824~849MHz LTE Band 7:2500~2570MHz LTE Band 38: 2570-2620MHz LTE Band 40: 2305-2315MHz/ 2350-2360MHz LTE Band 41: 2496-2690MHz
	NFC	13.56MHz
Rating:	Input: 12-24V	
Hardware Version:	N/A	



Software Version:	N/A
-------------------	-----

1.2 TEST LABORATORY

Company Name:	Shenzhen LGT Test Service Co., Ltd.
Address:	Room 205, Building 13, Zone B, Zhenxiong Industrial Park, No.177, Renmin West Road, Jinsha, Kengzi Street, Pingshan District, Shenzhen, Guangdong, China
Accreditation Certificate:	FCC Registration No.: 746540
	CAB ID: CN0136



2. FCC 47CFR §2.1091 REQUIREMENT

2.1 TEST STANDARDS

The limit for Maximum Permissible Exposure (MPE) specified in FCC 1.1310 is followed. The gain of the antennas used in the product is extracted from the Antenna data sheets provided and also the maximum total power input to the antenna is measured. Through the Friis transmission formula and the maximum gain of the antenna, we can calculate the distance, away from the product, where the limit of MPE is reached.

Although the Friis Transmission formula is far field assumption, the calculated result of that is an over-prediction for near field power density. It is taken as worst case to specify the safety range.

2.2 LIMIT

According to FCC 1.1310: The criteria listed in the following table shall be used to evaluate the environmental impact of the human exposure to radio-frequency (RF) radiation as specified in 1.1307 (b)

Limits for Maximum Permissible Exposure (MPE)

Frequency Range (MHz)	Electric Field Strength (V/m)	Magnetic Field Strength (A/m)	Power Density (mW/cm ²)
Limits for Occupational / controlled Exposures			
0.3-3.0	614	1.63	*(100)
3.0-30	1842/f	4.89/f	*(900/f ²)
30-300	61.4	0.163	1.0
300 - 1500	--	--	F/300
1500 – 100000	--	--	5.0
Limits for General population / Uncontrolled Exposure			
0.3-1.34	614	1.63	*(100)
1.34-30	824/f	2.19/f	*(180/f ²)
30-300	27.5	0.073	0.2
300 - 1500	--	--	F/1500
1500 – 100000	--	--	1.0

F= Frequency in MHz

* = Plane-wave equivalent power density.

Friss Formula

Friss Transmission 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 the center of radiator in cm

If we know the maximum gain of the antenna and the total output power to the antenna, through calculation, we will know MPE value at distance 20cm.



2.3 EUT OPERATION CONDITION

EUT was enabled to transmit and receive at lowest, middle and highest channels.

2.4 CLASSIFICATION

The antenna of this product, under normal use condition, is at least 20cm away from the body of the user. Warning statement to the user for keeping at least 20cm or more separation distance from the antenna should be included in the User manual. So, this device is classified as Mobile device.



2.5 TEST RESULT

Turn up Result

Mode	Turn up Power
GSM 850	32.5±1dBm
GSM 1900	28±1dBm
WCDMA B2	23±1dBm
WCDMA B4	22±1dBm
WCDMA B5	23±1dBm
LTE B2	22.9±1dBm
LTE B4	23±1dBm
LTE B5	24±1dBm
LTE B7	23±1dBm
LTE B38	23±1dBm
LTE B40	15.6±1dBm
LTE B41	23±1dBm
BT-GFSK	3.5±1dBm
BT-π/4-DQPSK	5.5±1dBm
BT-8DPSK	6±1dBm
BLE 1M-GFSK	-1±1dBm
2.4G WIFI-802.11b	14±1dBm
2.4G WIFI-802.11g	13.5±1dBm
2.4G WIFI-802.11n(HT20)	13.5±1dBm
2.4G WIFI-802.11n(HT40)	13±1dBm
5G WIFI-802.11a	10.5±3dBm
5G WIFI-802.11n(HT20)	10±3dBm
5G WIFI-802.11n(HT40)	10±3dBm
5G WIFI-802.11ac(VHT20)	10±3dBm
5G WIFI-802.11ac(VHT40)	10±2.5dBm
5G WIFI-802.11ac(VHT80)	10±3dBm
NFC	-38.5±1dBm

Note: dBm = dBu/m@3m + 95.2 = 57.77 - 95.2 = -37.43dBm



The MPE result of worst mode:

RF Function	Max Turn up Power (dBm)	Duty cycle factor	Max Power (dBm)	Max Power (mW)	ANT Gain (dBi)	ANT Gain (gain of antenna in linear scale)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Ratio	Result
GSM 850	33.5	-9.03	24.47	279.90	-0.71	0.85	0.047	0.549	0.086	Pass
GSM 1900	29	-9.03	19.97	99.31	1.68	1.47	0.029	1.000	0.029	Pass
WCDMA Band 2	24	0	24	251.19	1.68	1.47	0.074	1.000	0.074	Pass
WCDMA Band 4	23	0	23	199.53	3.73	2.36	0.094	1.000	0.094	Pass
WCDMA Band 5	24	0	24	251.19	-0.71	0.85	0.042	0.549	0.077	Pass
LTE Band 2	23.9	0	23.9	245.47	1.68	1.47	0.072	1.000	0.072	Pass
LTE Band 4	24	0	24	251.19	3.73	2.36	0.118	1.000	0.118	Pass
LTE Band 5	25	0	25	316.23	-0.71	0.85	0.053	0.549	0.097	Pass
LTE Band 7	24	0	24	251.19	2.04	1.60	0.080	1.000	0.080	Pass
LTE Band 38	24	-1.99	22.01	158.85	-0.06	0.99	0.031	1.000	0.031	Pass
LTE Band 40	16.6	-1.99	14.61	28.91	3.13	2.06	0.012	1.000	0.012	Pass
LTE Band 41	24	-1.99	22.01	158.85	2.11	1.63	0.051	1.000	0.051	Pass

RF Function	Max Turn up Power (dBm)	Max Turn up Power (mW)	ANT Gain (dBi)	ANT Gain (gain of antenna in linear scale)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Ratio	Result
BLE	0.00	1.00	3.01	2.00	0.000	1	0.000	Pass
BT	7.00	5.01	3.01	2.00	0.002	1	0.002	Pass
2.4G WIFI	15.00	31.62	3.01	2.00	0.013	1	0.013	Pass
5G WIFI	13.50	22.39	3.98	2.50	0.011	1	0.011	Pass

RF Function	Frequency (MHz)	Max Turn up Power (dBm)	Max Turn up Power (mW)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Ratio	Result
NFC	13.56	-37.50	0.0001778	0.0000000354	0.979	0.0000000361	Pass

Multiple transmission: LTE B4+2.4G WIFI+NFC=0.118+0.013+0.00000004=0.13100004 < 1

Note: The RF Exposure is less than the limit, complies with the exemption requirements.

END OF THE REPORT