




TEST REPORT

FCC ID	RSN-UWBCBAND	
Test Report No.	TCT240219E020	
Date of issue	Apr. 10, 2024	
Testing laboratory	SHENZHEN TONGCE TESTING LAB	
Testing location/ address:	2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China	
Applicant's name	Cellphone-Mate Inc. dba SureCall	
Address	48346 Milmont Drive, Fremont, California 94538, United States	
Manufacturer's name ...	Shenzhen Surecall Comm Tech Co Ltd	
Address	2nd Floor, Yutian Bldg Yangtian Rd. 72nd Zone Bao'an District, Shenzhen, 518100 China	
Standard(s)	FCC Part §1.1310	
Product Name	SureCall ULTRAWIDEBAND 5G C-BAND SIGNAL BOOSTER	
Trade Mark	Surecall	
Model/Type reference	SC-5G-CB	
Rating(s)	Adapter Information: MODEL: KZI2802000 INPUT: AC 100-240V, 50/60Hz, 1.5A MAX OUTPUT: DC 28.0V, 2.0A, 56.0W	
Date of receipt of test item	Feb. 19, 2024	
Date (s) of performance of test	Feb. 19, 2024 ~ Apr. 10, 2024	
Tested by (+signature) ...	Brews XU	
Check by (+signature)	Beryl ZHAO	
Approved by (+signature):	Tomsin	



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1. General Product Information

1.1. EUT description

Product Name.....:	SureCall ULTRAWIDEBAND 5G C-BAND SIGNAL BOOSTER
Model/Type reference.....:	SC-5G-CB
Sample Number.....:	TCT240219E019-0101
Operation Frequency	Full Band Mode: UL: 3700MHz – 3980MHz DL: 3700MHz – 3980MHz Sub-Band Mode: UL: 3700MHz – 3840MHz DL: 3700MHz – 3840MHz
Signal Booster Type.....:	Industrial Signal Booster
Emission Designator	G7D, W7D
FCC Classification	B2I-Part 20 Industrial Booster (CMRS)
Antenna Gain.....:	Outdoor: 20dBi Indoor: 12dBi
Cable Loss	Outdoor: 10dB Indoor: 10dB
Rating(s).....:	Adapter Information: MODEL: KZI2802000 INPUT: AC 100-240V, 50/60Hz, 1.5A MAX OUTPUT: DC 28.0V, 2.0A, 56.0W

Note: The antenna gain listed in this report is provided by applicant, and the test laboratory is not responsible for this parameter.

1.2. Model(s) list

None.

2. General Information

2.1. Test environment and mode

Item	Normal condition
Temperature	+25°C
Voltage	DC 28V
Humidity	56%
Atmospheric Pressure:	1008 mbar
Test Mode:	
Engineering mode:	Keep the EUT in continuous transmitting by select channel

2.2. Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units. The following support units or accessories were used to form a representative test configuration during the tests.

Equipment	Model No.	Serial No.	FCC ID	Trade Name
/	/	/	/	/

3. Facilities and Accreditations

3.1. Facilities

The test facility is recognized, certified, or accredited by the following organizations:

- FCC - Registration No.: 645098

SHENZHEN TONGCE TESTING LAB

Designation Number: CN1205

The testing lab has been registered and fully described in a report with the (FCC) Federal Communications Commission. The acceptance letter from the FCC is maintained in our files.

- IC - Registration No.: 10668A-1

SHENZHEN TONGCE TESTING LAB

CAB identifier: CN0031

The testing lab has been registered by Certification and Engineering Bureau of Industry Canada for radio equipment testing.

3.2. Location

SHENZHEN TONGCE TESTING LAB

Address: 2101 & 2201, Zhenchang Factory Renshan Industrial Zone, Fuhai Subdistrict, Bao'an District, Shenzhen, Guangdong, 518103, People's Republic of China

TEL: +86-755-27673339

4. Test Results and Measurement Data

4.1. Requirements

Limits For Maximum Permissible Exposure (MPE)				
Frequency range (MHz)	Electric field strength(V/m)	Magnetic field Strength(A/m)	Power density (mw/cm ²)	Averaging time (minutes)
0.3-1.34	614	1.63	*100	30
1.34-30	824/f	2.19/f	*180/f ²	30
30-300	27.5	0.0173	0.2	30
300-1,500			f/1500	30
1,500-100,000			1.0	30

4.2. MPE Calculation

Predication of MPE limit at a given distance

$$S = \frac{PG}{4\pi R^2}$$

S = Power density (In appropriate units, e.g., W/m²)

P = Power input to the antenna (In appropriate units, e.g., W)

G = Power gain og the antenna in the direction of interest relative to an isotropic radiator, the power gain factor,

Is normally numeric gain

R =Distance to the center of radiation of the antenna(In appropriate units, e.g., m)

4.3. Test Result

Operation Frequency Band (MHz)			Total Output Power (dBm)	Cable Loss (dB)	Power to Antenna (mW)	Antenna gain	
						Isotropic	Numeric
Full-Band (3700MHz -3980MHz)	Uplink	NR 20MHz	34.66	10	292.42	23	199.53
		NR 40MHz	34.68	10	293.76	23	199.53
		NR 60MHz	34.49	10	281.19	23	199.53
		NR 80MHz	34.30	10	269.15	23	199.53
		NR 100MHz	33.94	10	247.74	23	199.53
	Downlink	NR 20MHz	34.02	10	252.35	15	31.62
		NR 40MHz	34.86	10	306.20	15	31.62
		NR 60MHz	34.39	10	274.79	15	31.62
		NR 80MHz	34.27	10	267.30	15	31.62
		NR 100MHz	34.50	10	281.84	15	31.62
Sub-Band (3700MHz -3980MHz)	Uplink	NR 20MHz	33.70	10	234.42	23	199.53
		NR 40MHz	33.57	10	227.51	23	199.53
		NR 60MHz	33.29	10	213.30	23	199.53
		NR 80MHz	32.77	10	189.23	23	199.53
		NR 100MHz	32.71	10	186.64	23	199.53
	Downlink	NR 20MHz	34.14	10	259.42	15	31.62
		NR 40MHz	34.34	10	271.64	15	31.62
		NR 60MHz	34.51	10	282.49	15	31.62
		NR 80MHz	34.50	10	281.84	15	31.62
		NR 100MHz	34.08	10	255.86	15	31.62

Operation Frequency Band (MHz)		Power (mW)	Antenna Gain(G)	Measure Distance (cm)	Power Density (mW/cm ²)	MPE Limit (mW/cm ²)	
Full-Band (3700MHz -3980MHz)	Uplink	NR 20MHz	292.42	199.53	100	0.4643	1
		NR 40MHz	293.76	199.53	100	0.4664	1
		NR 60MHz	281.19	199.53	100	0.4465	1
		NR 80MHz	269.15	199.53	100	0.4274	1
		NR 100MHz	247.74	199.53	100	0.3934	1
	Downlink	NR 20MHz	252.35	31.62	100	0.0635	1
		NR 40MHz	306.20	31.62	100	0.0771	1
		NR 60MHz	274.79	31.62	100	0.0691	1
		NR 80MHz	267.30	31.62	100	0.0673	1
		NR 100MHz	281.84	31.62	100	0.0709	1
Sub-Band (3700MHz -3980MHz)	Uplink	NR 20MHz	234.42	199.53	100	0.3722	1
		NR 40MHz	227.51	199.53	100	0.3612	1
		NR 60MHz	213.30	199.53	100	0.3387	1
		NR 80MHz	189.23	199.53	100	0.3005	1
		NR 100MHz	186.64	199.53	100	0.2963	1
	Downlink	NR 20MHz	259.42	31.62	100	0.0653	1
		NR 40MHz	271.64	31.62	100	0.0684	1
		NR 60MHz	282.49	31.62	100	0.0711	1
		NR 80MHz	281.84	31.62	100	0.0709	1
		NR 100MHz	255.86	31.62	100	0.0644	1

Results: PASS

*****END OF REPORT*****