

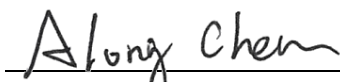
FCC RF Exposure Report

FCC ID : 2A7G3XS5G0304
Equipment : 5G DATA CARD
Model No. : XS5G03-GB0
(refer to item 1.1.1 for more details)
Brand Name : XSquare
Applicant : XSquare Communications Corporation
Address : NO.6 INNOVATION ROAD II, SCIENCE PARK,
HSINCHU 30076, TAIWAN, R.O.C
Standard : 47 CFR FCC Part 2.1091
Received Date : Aug. 18, 2015
Tested Date : Aug. 23 ~ Sep. 04, 2015

We, International Certification Corp., would like to declare that the tested sample has been evaluated and in compliance with the requirement of the above standards. The test results contained in this report refer exclusively to the product. It may be duplicated completely for legal use with the approval of the applicant. It shall not be reproduced except in full without the written approval of our laboratory.

Reviewed by:

Approved by:



Along Chen / Assistant Manager



Gary Chang / Manager

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Release Record

Report No.	Version	Description	Issued Date
FA261301	Rev. 01	Initial issue	Sep. 23, 2022

1 General Description

1.1 Information

1.1.1 Product Details

The following models are provided to this EUT.

Brand Name	Model Name	Product Name	Description
XSquare	XS5G03-GB0	5G DATA CARD	(SA+NSA)+GPS
	XS5G04-GB0		(SA Only)+GPS XS5G03-GB0 base band IC disable NSA by SW
★ The above models, model XS5G03-GB0 was selected as a representative one for the final test and only its data was recorded in this report.			

2 MPE EVALUATION OF MOBILE DEVICES

Human exposure to RF emissions from mobile devices (47 CFR §2.1091) may be evaluated based on the MPE limits adopted by the FCC for electric and magnetic field strength and/or power density, as appropriate, since exposures are assumed to occur at distances of 20 cm or more from persons.

2.1 LIMITS FOR GENERAL POPULATION/UNCONTROLLED EXPOSURE

Frequency Range (MHz)	Power Density (mW /cm ²)	Averaging Time (minutes)
300~1500	F/1500	30
1500~100000	1.0	30

2.2 MPE EVALUATION FORMULA

$$Pd = \frac{Pt}{4 * \pi * R^2}$$

Where

Pd= Power density in mW/cm²

Pt= EIRP in mW

π= 3.1416

R= Measurement distance

2.3 MPE EVALUATION RESULTS

Mode	Frequency (MHz)	Maximum Conducted Power (dBm)	Rated Power (dBm)	Antenna Gain (dBi)	Distance (cm)	Power Density (mW/cm ²)	Limit (mW/cm ²)	Pass / Fail
WCDMA B2	1850	22.41	22.5	0.2	20	0.037	1.000	Pass
WCDMA B5	824	22.25	22.5	-1.2	20	0.027	0.549	Pass
LTE Band 2	1850	21.59	22	0.2	20	0.033	1.000	Pass
LTE Band 4	1710	21.71	22	1.9	20	0.049	1.000	Pass
LTE Band 5	824	21.66	22	-1.2	20	0.024	0.549	Pass
LTE Band 7	2500	22.38	22.5	-1.1	20	0.027	1.000	Pass
LTE Band 12	699	21.69	22	-0.7	20	0.027	0.466	Pass
LTE Band 13	777	21.56	22	-0.7	20	0.027	0.518	Pass
LTE Band 14	788	21.57	22	-0.7	20	0.027	0.525	Pass
LTE Band 17	704	21.58	22	-0.7	20	0.027	0.469	Pass
LTE Band 18	815	21.62	22	-1.2	20	0.024	0.543	Pass
LTE Band 19	830	21.62	22	-1.2	20	0.024	0.553	Pass
LTE Band 25	1850	21.79	22	0.2	20	0.033	1.000	Pass
LTE Band 26	814	21.69	22	-1.2	20	0.024	0.543	Pass
LTE Band 30	2305	22.46	22.5	-2.1	20	0.022	1.000	Pass
LTE Band 38	2570	22.73	23	-1.1	20	0.031	1.000	Pass
LTE Band 40	2300	22.64	23	-2.1	20	0.024	1.000	Pass
LTE Band 41	2496	22.49	22.5	-1.1	20	0.027	1.000	Pass
LTE Band 42	3400	23.39	23.5	-0.4	20	0.041	1.000	Pass
LTE Band 48	3550	22.92	23	-0.4	20	0.036	1.000	Pass
LTE Band 66	1710	21.91	22	1.9	20	0.049	1.000	Pass
5G NR n2	1850	22.35	22.5	0.2	20	0.037	1.000	Pass
5G NR n5	824	22.26	22.5	-1.2	20	0.027	0.549	Pass
5G NR n77	3450	22.81	23	-0.2	20	0.038	1.000	Pass
5G NR n77	3700	22.85	23	-0.2	20	0.038	1.000	Pass

2.4 MAXIMUM ANTENNA GAIN EVALUATION (REFERENCE ONLY)

Mode	Rated power (dBm)	Max Gain to comply with MPE			Max Gain to comply with ERP/EIRP		Max Gain to comply with MPE and ERP/EIRP (dBi)
		Antenna Gain (dBi)	Distance (cm)	Limit (mW/cm ²)	Antenna Gain (dBi)	Limit (W)	
WCDMA B2	22.50	14.51	20	1.000	10.51	2	10.51
WCDMA B5	22.50	11.91	20	0.549	18.10	7	11.91
LTE Band 2	22	15.01	20	1.000	11.01	2	11.01
LTE Band 4	22	15.01	20	1.000	8.00	1	8.00
LTE Band 5	22	12.41	20	0.549	18.60	7	12.41
LTE Band 7	22.5	14.51	20	1.000	10.51	2	10.51
LTE Band 12	22	11.70	20	0.466	14.92	3	11.70
LTE Band 13	22	12.16	20	0.518	14.92	3	12.16
LTE Band 14	22	12.22	20	0.525	14.92	3	12.22
LTE Band 17	22	11.73	20	0.469	14.92	3	11.73
LTE Band 18	22	12.36	20	0.543	18.60	7	12.36
LTE Band 19	22	12.44	20	0.553	18.60	7	12.44
LTE Band 25	22	15.01	20	1.000	11.01	2	11.01
LTE Band 26	22	12.36	20	0.543	18.60	7	12.36
LTE Band 30	22.5	14.51	20	1.000	1.48	0.25	1.48
LTE Band 38	23	14.01	20	1.000	10.01	2	10.01
LTE Band 40	23	14.01	20	1.000	0.98	0.25	0.98
LTE Band 41	22.5	14.51	20	1.000	10.51	2	10.51
LTE Band 42	23.5	13.51	20	1.000	6.50	1	6.50
LTE Band 48	23	14.01	20	1.000	0.01	0.2	0.01
LTE Band 66	22	15.01	20	1.000	8.00	1	8.00
5G NR n2	22.5	14.51	20	1.000	10.51	2	10.51
5G NR n5	22.5	11.91	20	0.549	9.65	1	9.65
5G NR n77	23	14.01	20	1.000	7.00	1	7.00
5G NR n77	23	14.01	20	1.000	7.00	1	7.00

3 Test laboratory information

Established in 2012, ICC provides foremost EMC & RF Testing and advisory consultation services by our skilled engineers and technicians. Our services employ a wide variety of advanced edge test equipment and one of the widest certification extents in the business.

International Certification Corp, it is our definitive objective is to institute long term, trust-based associations with our clients. The expectation we set up with our clients is based on outstanding service, practical expertise and devotion to a certified value structure. Our passion is to grant our clients with best EMC / RF services by oriented knowledgeable and accommodating staff.

Our Test sites are located at Linkou District and Kwei Shan Hsiang. Location map can be found on our website <http://www.icertifi.com.tw>.

Linkou

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No. 30-2, Ding Fwu Tsuen, Lin Kou
District, New Taipei City, Taiwan,
R.O.C.

Kwei Shan

Tel: 886-3-271-8666

No. 3-1, Lane 6, Wen San 3rd
St., Kwei Shan Hsiang, Tao Yuan
Hsien 333, Taiwan, R.O.C.

Kwei Shan Site II

Tel: 886-3-271-8640

No. 14-1, Lane 19, Wen San 3rd
St., Kwei Shan Hsiang, Tao Yuan
Hsien 333, Taiwan, R.O.C.

If you have any suggestion, please feel free to contact us as below information

Tel: 886-3-271-8666

Fax: 886-3-318-0155

Email: ICC_Service@icertifi.com.tw

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