

SZEMC-TRF-01 Rev. A/1 Report No.: SZCR240700274103

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RF EXPOSURE EVALUATION REPORT

Application No.: SZCR2407002741MO

Applicant: Telit Communications S.p.A.

Address of Applicant: Via Stazione di Prosecco 5/b, 34010 Sgonico – Trieste, Italy

Manufacturer: Telit Communications S.p.A.

Address of Manufacturer: Via Stazione di Prosecco 5/b, 34010 Sgonico – Trieste, Italy

Factory: FUYU PRECISION COMPONENT CO., LTD

Address of Factory: Lot M1, Lot F and Lot T1 Quang Chau Industrial Zone, Van Trung Ward,

Viet Yen Town, Bac Giang Province, Vietnam

Equipment Under Test (EUT):

EUT Name:Radio ModuleModel No.:LE910Q1-WWTrade Mark:Telit CinterionFCC ID:RI7LE910Q1WW

Standard(s): FCC Rules 47 CFR §2.1091

KDB 447498 D04 interim General RF Exposure Guidance v01

Date of Receipt: 2024-07-12

Date of Evaluation: 2024-07-16 to 2024-11-20

Date of Issue: 2024-11-21

Evaluation Result: Pass*

Keny Xu EMC Laboratory Manager

Ceny. Ku



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^{*} In the configuration evaluated, the EUT complied with the standards specified above.



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	Revision Record								
Version	Chapter	Date	Modifier	Remark					
01		2024-11-21		Original					

Authorized for issue by:		
	Calvin Weng	
	Calvin Weng/Project Engineer	-
	Exic Fu	
	Eric Fu/Reviewer	-



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General Information

3.1 General Description of E.U.T.

	☐ Portable device
Product Type:	⊠ Mobile device
	☐ Fixed device

3.2 Details of E.U.T.

Power supply: **DC3.8V**

Cable Loss (for RF conducted

test):

Below 1GHz: 0.5dB, 1GHz~2GHz:0.7dB, Above 2GHz: 1dB

Sample Type: Mobile production

LTE B2/4/5/7/8/12/13/25/26/38/41/66 LTE Operation Frequency Band:

QPSK, 16QAM Modulation Type:

LTE Power Class: Level 3

Antenna Type: **External Antenna**

LTE B2: 2.17dBi, B4: 2.17dBi, B5: 5.17dBi, B7: 2.17dBi, B8:

5.17dBi, B12: 3.17dBi, B13: 3.17dBi, B25: 2.17dBi, B26: 5.17dBi, Antenna Gain:

B38: 2.17dBi, B41: 2.17dBi, B66: 2.17dBi

Remark: The information in this section is provided by the applicant or manufacturer, SGS is not liable to the accuracy, suitability, reliability or/and integrity of the information.

3.3 Separation Distance

Minimum test separation distance: 20cm

Remark: This minimum test separation distance is determined by the smallest distance from the antenna and radiating structures or outer surface of the device, according to the host form factor, exposure conditions and platform requirements, to any part of the body or extremity of a user or bystander.



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3.4 Test Location

All tests were performed at:

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen Branch

No. 1 Workshop, M-10, Middle Section, Science & Technology Park, Nanshan District, Shenzhen, Guangdong, China. 518057.

Tel: +86 755 2601 2053 Fax: +86 755 2671 0594

No tests were sub-contracted.

3.5 Test Facility

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

A2LA (Certificate No. 3816.01)

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory is accredited by the American Association for Laboratory Accreditation(A2LA). Certificate No. 3816.01.

VCCI (Member No. 1937)

The 3m Fully-anechoic chamber for above 1GHz, 10m Semi-anechoic chamber for below 1GHz, Shielded Room for Mains Port Conducted Interference Measurement and Telecommunication Port Conducted Interference Measurement of SGS-CSTC Standards Technical Services Co., Ltd. Shenzhen EMC laboratory have been registered in accordance with the Regulations for Voluntary Control Measures with Registration No.: G-20026, R-14188, C-12383 and T-11153 respectively.

• FCC -Designation Number: CN1336

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized as an accredited testing laboratory.

Designation Number: CN1336. Test Firm Registration Number: 787754.

• Innovation, Science and Economic Development Canada

SGS-CSTC Standards Technical Services Co., Ltd., Shenzhen EMC Laboratory has been recognized by ISED as an accredited testing laboratory.

CAB identifier: CN0006.

IC#: 4620C.

3.6 Deviation from Standards

None

Abnormalities from Standard Conditions

None



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FCC Radiofrequency radiation exposure limits

According to §1.1310, the limit for general population/uncontrolled exposures

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm²)	Averaging time (minutes)					
Limits for General Population/Uncontrolled Exposure									
0.3-1.34	614	1.63	*(100)	30					
1.34-30 824/f		2.19/f	*(180/f2)	30					
30-300	27.5	0.073	0.2	30					
300-1500	/	/	f/1500	30					
1500-100,000	/	/	1.0	30					



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5 **Measurement and Calculation**

MPE Calculation

According to the formula $S=P/4\pi R^2$, we can calculate S which is MPE.

Note:

1)P (mW)

2) R = distance to the center of radiation of antenna (in centimeter)

3) MPE limit = 1mW/cm²

Operating Band	Frequency (MHz)	Antenna Gain (dBi)	Max Conducted Power (dBm)	EIRP(ERP) (dBm)	EIRP(ERP) Limit (dBm)	Power Density at R = 20 cm (mW/cm2)	Limit (mW/cm2)	Gain according to EIRP(ERP) (dBi)	Gain according to Pd (dBi)	Max Gain Allowed (dBi)	conclusion
LTE Band 2	1850.7	2.17	25.00	27.17	33.00	0.1037	1.0000	8.00	12.01	8.00	Pass
LTE Band 4	1710.7	2.17	25.00	27.17	30.00	0.1037	1.0000	5.00	12.01	5.00	Pass
LTE Band 5	824.7	5.17	25.00	28.02	38.45	0.1261	0.5498	15.60	9.41	9.41	Pass
LTE Band 7	2502.5	2.17	25.00	27.17	33.00	0.1037	1.0000	8.00	12.01	8.00	Pass
LTE Band 8	898.2	5.17	25.00	28.02	34.77	0.1261	0.5988	11.92	9.78	9.78	Pass
LTE Band 12	699.7	3.17	25.00	26.02	34.77	0.0796	0.4665	11.92	8.70	8.70	Pass
LTE Band 13	779.5	3.17	25.00	26.02	34.77	0.0796	0.5197	11.92	9.16	9.16	Pass
LTE Band 25	1850.7	2.17	25.00	27.17	33.00	0.1037	1.0000	8.00	12.01	8.00	Pass
LTE Band 26(814- 824)	814.7	5.17	25.00	28.02	50.00	0.1261	0.5431	27.15	9.36	9.36	Pass
LTE Band 26(824- 849)	824.7	5.17	25.00	28.02	38.45	0.1261	0.5498	15.60	9.41	9.41	Pass
LTE Band 38	2572.5	2.17	25.00	27.17	33.00	0.1037	1.0000	8.00	12.01	8.00	Pass
LTE Band 41	2498.5	2.17	25.00	27.17	33.00	0.1037	1.0000	8.00	12.01	8.00	Pass
LTE Band 66	1710.7	2.17	25.00	27.17	30.00	0.1037	1.0000	5.00	12.01	5.00	Pass

Remark: Max output power including tune up.

-End of the Report-



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