



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

SZEMC-TRF-01 Rev. A/1

Report No.: SZCR241000393903

Page: 1 of 7

RF EXPOSURE EVALUATION REPORT

Application No.: SZCR2410003939MO
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 Module
Model No.: LE910Q1-SN
Trade Mark: Telit Cinterion
FCC ID: RI7LE910Q1SN
Standard(s) : FCC Rules 47 CFR §2.1091
KDB 447498 D04 interim General RF Exposure Guidance v01
Date of Receipt: 2024-10-24
Date of Evaluation: 2024-10-25 to 2024-11-01
Date of Issue: 2024-11-04

Evaluation Result:	Pass*
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* In the configuration evaluated, the EUT complied with the standards specified above.

Keny Xu

Keny Xu
EMC Laboratory Manager



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

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Page: 2 of 7

Revision Record				
Version	Chapter	Date	Modifier	Remark
01		2024-11-04		Original

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



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2 Contents

	Page
1 Cover Page	1
2 Contents	3
3 General Information	4
3.1 General Description of E.U.T.	4
3.2 Details of E.U.T.	4
3.3 Separation Distance	4
3.4 Test Location	5
3.5 Test Facility	5
3.6 Deviation from Standards	5
3.7 Abnormalities from Standard Conditions	5
4 FCC Radiofrequency radiation exposure limits	6
5 Measurement and Calculation	7



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3 General Information

3.1 General Description of E.U.T.

Product Type:	☐ Portable device
	☒ 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 Operation Frequency Band:	LTE B2/4/5/12/13/66
Modulation Type:	QPSK, 16QAM
LTE Power Class:	Level 3
Antenna Type:	External Antenna
Antenna Gain:	LTE B2: 2.17dBi, B4: 2.17dBi, B5: 5.17dBi, B12: 3.17dBi, B13: 3.17dBi, 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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SZEMC-TRF-01 Rev. A/1

Report No.: SZCR241000393903

Page: 5 of 7

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

3.7 Abnormalities from Standard Conditions

None



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4 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/cm ²)	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/f ²)	30
30-300	27.5	0.073	0.2	30
300-1500	/	/	f/1500	30
1500-100,000	/	/	1.0	30

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/cm ²)	Limit (mW/cm ²)	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 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 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-