RF EXPOSURE EVALUATION REPORT

FCC ID	**: RI7FN990A28**
Equipment	**: Certified Modem Terminal**
Brand Name	**: Telit Cinterion**
Model Name	**: CMT700A0**
Marketing Name	**: CMT700A0**
Applicant	**: Telit Communications S.p.A. Via Stazione di Prosecco 5/b, 34010 Sgonico (Trieste), Italy**
Manufacturer	**: Telit Communications S.p.A. Via Stazione di Prosecco 5/b, 34010 Sgonico (Trieste), Italy**
Standard	**: 47 CFR Part 2.1091**

We, SPORTON INTERNATIONAL INC has been evaluated this product in accordance with 47 CFR Part2.1091 and it complies with applicable limit.

Sporton Lab is accredited to ISO 17025 by Taiwan Accreditation Foundation (TAF code: 3786) and the FCC designation No. TW3786 under the FCC 2.948(e) by Mutual Recognition Agreement (MRA) in FCC evaluation.

The results in this report apply exclusively to the tested model / sample. Without written approval of SPORTON INTERNATIONAL INC. Laboratory, the test report shall not be reproduced except in full.

Cona Huang

Approved by: Cona Huang / Deputy Manager

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History of this test report

Report No.	Version	Description	Issued Date
FA461443	Rev. 01	Initial issue of report	May 06, 2025

1. Description of Equipment Under Test (EUT)

Product Feature & Specification	
EUT Type	Certified Modem Terminal
Brand Name	Telit Cinterion
Model Name	CMT700A0
Marketing Name	CMT700A0
FCC ID	RI7FN990A28
Wireless Technology and Frequency Range	WCDMA Band II: 1850 MHz ~ 1910 MHz WCDMA Band IV: 1710 MHz ~ 1755 MHz WCDMA Band V: 824 MHz ~ 849 MHz LTE Band 2: 1850 MHz ~ 1910 MHz LTE Band 4: 1710 MHz ~ 1755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2500 MHz ~ 2570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 17: 704 MHz ~ 716 MHz LTE Band 25: 1850 MHz ~ 1915 MHz LTE Band 26: 814 MHz ~ 849 MHz LTE Band 30: 2305 MHz ~ 2315 MHz LTE Band 38: 2570 MHz ~ 2620 MHz LTE Band 41: 2496 MHz ~ 2690 MHz LTE Band 42: 3450 MHz ~ 3550 MHz, 3550 MHz ~ 3600 MHz LTE Band 43: 3600 MHz ~ 3700 MHz LTE Band 48: 3550 MHz ~ 3700 MHz LTE Band 66: 1710 MHz ~ 1780 MHz LTE Band 71: 663 MHz ~ 698 MHz 5G NR n2 : 1850 MHz ~ 1910 MHz 5G NR n5 : 824 MHz ~ 849 MHz 5G NR n7 : 2500 MHz ~ 2570 MHz 5G NR n12: 699 MHz ~ 716 MHz 5G NR n13: 777 MHz ~ 787 MHz 5G NR n14: 788 MHz ~ 798 MHz 5G NR n25 : 1850 MHz ~ 1915 MHz 5G NR n26: 814 MHz ~ 849 MHz 5G NR n30 : 2305 MHz ~ 2315 MHz 5G NR n38 : 2570 MHz ~ 2620 MHz 5G NR n41 : 2496 MHz ~ 2690 MHz 5G NR n48 : 3550 MHz ~ 3700 MHz 5G NR n66 : 1710 MHz ~ 1780 MHz 5G NR n71 : 663 MHz ~ 698 MHz 5G NR n77: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3980 MHz 5G NR n78: 3450 MHz ~ 3550 MHz, 3700 MHz ~ 3800 MHz
Mode	RMC 12.2Kbps HSDPA HSUPA DC-HSDPA LTE: QPSK, 16QAM, 64QAM, 256QAM 5G NR: DFT-s-OFDM/CP-OFDM, Pi/2 BPSK/QPSK/16QAM/64QAM/256QAM
HW	1.0
SW	M0R.000005
EUT Stage	Identical Prototype

Reviewed by: Jason Wang

Report Producer: Paula Chen

2. Maximum RF average output power among production units

Mode		Maximum Average power(dBm)
WCDMA	Band 2	24.5
	Band 4	24.5
	Band 5	24.5
LTE	Band 2	24
	Band 4	24
	Band 5	24
	Band 7	24
	Band 12	24
	Band 13	24
	Band 14	24
	Band 17	24
	Band 25	24
	Band 26	24
	Band 30	23
	Band 38	24
	Band 41	26.5
	Band 42	22.5
	Band 43	22.5
	Band 48	22.5
	Band 66	24
	Band 71	24
5G NR	n2	24.5
	n5	24.5
	n7	24.5
	n12	24
	n13	24
	n14	24
	n25	24.5
	n26	24
	n30	23
	n38	25
	n41	27.5
	n48	22.5
	n66	24.5
	n71	24.5
	n77	27.5
	n78	27.5

3. RF Exposure Limit Introduction

According to ANSI/IEEE C95.1-1992, the criteria listed in Table 1 shall be used to evaluate the environmental impact of human exposure to radio frequency (RF) radiation as specified in §1.1310.

Frequency range (MHz)	Electric field strength (V/m)	Magnetic field strength (A/m)	Power density (mW/cm^2)	Averaging time (minutes)
(A) Limits for Occupational/Controlled Exposures				
0.3-3.0	614	1.63	*(100)	6
3.0-30	1842/f	4.89/f	*(900/f2)	6
30-300	61.4	0.163	1.0	6
300-1500			f/300	6
1500-100,000			5	6
(B) 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

The MPE was calculated at 20 cm to show compliance with the power density limit.

The following formula was used to calculate the Power Density:

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

Where:
S = Power Density
P = Output Power at Antenna Terminals
G = Gain of Transmit Antenna (linear gain)
R = Distance from Transmitting Antenna

4. Radio Frequency Radiation Exposure Evaluation

General Note:

1. The device support DPS (Dynamic Power Share) function to achieve higher uplink data rate keeping the total power unchanged in 5G NR NSA EN-DC mode according to 3GPP 38.213, when the equipment has a dynamic power sharing capability, it adjusts the LTE or NR transmission power so that the instantaneous total power does not exceed the specified value, when the maximum transmission power of NR (P LTE, P NR) and the specified total power (P total) have been set and the instantaneous calculated total transmission power exceeds P total, the NR transmission power is reduced so that the actual transmission power of the user equipment will not exceed Ptotal power. So if the LTE and NR standalone SAR is testing at total power level, the EN-DC combine MPE(LTE+NR) will not higher than the each standalone LTE and NR MPE, therefore, the simultaneous transmission analysis is used standalone MPE at total power level to show compliance.

Band	Antenna Gain (dBi)	Maximum Power (dBm)	Maximum EIRP (dBm)	Maximum PG (mW)	Power Density at 20cm (mW/cm^2)	Limit (mW/cm^2)	Power Density / Limit
WCDMA Band 2	3.08	24.50	27.6	572.80	0.114	1.000	0.114
WCDMA Band 4	3.34	24.50	27.8	608.14	0.121	1.000	0.121
WCDMA Band 5	2.28	24.50	26.8	476.43	0.095	0.536	0.177
LTE Band 2	3.08	24.00	27.1	510.50	0.102	1.000	0.102
LTE Band 4	3.34	24.00	27.3	542.00	0.108	1.000	0.108
LTE Band 5	2.28	24.00	26.3	424.62	0.085	0.549	0.154
LTE Band 7	3.40	24.00	27.4	549.54	0.109	1.000	0.109
LTE Band 12	3.04	24.00	27.0	505.82	0.101	0.466	0.216
LTE Band 13	2.99	24.00	27.0	500.03	0.100	0.518	0.192
LTE Band 14	2.20	24.00	26.2	416.87	0.083	0.525	0.158
LTE Band 17	3.04	24.00	27.0	505.82	0.101	0.469	0.215
LTE Band 25	3.08	24.00	27.1	510.50	0.102	1.000	0.102
LTE Band 26	2.28	24.00	26.3	424.62	0.085	0.543	0.156
LTE Band 30	0.94	23.00	23.9	247.74	0.049	1.000	0.049
LTE Band 38	3.33	24.00	27.3	540.75	0.108	1.000	0.108
LTE Band 41	3.61	26.50	30.1	1025.65	0.204	1.000	0.204
LTE Band 42	0.44	22.50	22.9	196.79	0.039	1.000	0.039
LTE Band 43	0.42	22.50	22.9	195.88	0.039	1.000	0.039
LTE Band 48	0.44	22.50	22.9	196.79	0.039	1.000	0.039
LTE Band 66	3.34	24.00	27.3	542.00	0.108	1.000	0.108
LTE Band 71	2.80	24.00	26.8	478.63	0.095	0.442	0.216
5G NR n2	3.08	24.50	27.6	572.80	0.114	1.000	0.114
5G NR n5	2.28	24.50	26.8	476.43	0.095	0.549	0.173
5G NR n7	3.40	24.50	27.9	616.60	0.123	1.000	0.123
5G NR n12	3.04	24.00	27.0	505.82	0.101	0.466	0.216
5G NR n13	2.99	24.00	27.0	500.03	0.100	0.518	0.192
5G NR n14	2.20	24.00	26.2	416.87	0.083	0.525	0.158
5G NR n25	3.08	24.50	27.6	572.80	0.114	1.000	0.114
5G NR n26	2.28	24.00	26.3	424.62	0.085	0.543	0.156
5G NR n30	0.94	23.00	23.9	247.74	0.049	1.000	0.049
5G NR n38	3.33	25.00	28.3	680.77	0.136	1.000	0.136
5G NR n41	3.61	27.50	31.1	1291.22	0.257	1.000	0.257
5G NR n48	0.44	22.50	22.9	196.79	0.039	1.000	0.039
5G NR n66	3.34	24.50	27.8	608.14	0.121	1.000	0.121
5G NR n71	2.80	24.50	27.3	537.03	0.107	0.442	0.242
5G NR n77	2.28	27.50	29.8	950.60	0.189	1.000	0.189
5G NR n78	1.19	27.50	28.7	739.61	0.147	1.000	0.147

Conclusion:

According to 47 CFR §2.1091, the RF exposure analysis concludes that the RF Exposure is FCC compliant.