

ELEMENT WASHINGTON DC LLC

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RF EXPOSURE EVALUATION Maximum Permissible Exposure (MPE)

Applicant Name:

Telit Communications S.p.A. Viale Stazione di Prosecco 5/b Trieste, 34010 Italy

Date of Testing:

09/22/2023

Test Report Issue Date:

09/22/2023

Test Site/Location:

Element lab., Columbia, MD, USA

Test Report Serial No.: 1M2306220084-05.RI7

FCC ID: **RI7FN990A28**

APPLICANT: Telit Communications S.p.A.

Class II Permissive Change Application Type:

Model: FN990A28 **EUT Type:** Module

FCC Classifications: PCS Licensed Transmitter (PCB),

Citizens Band End User Devices (CBE)

FCC Rule Part: FCC Part 1 (§1.1310) and Part 2 (§2.1091)

Class II Permissive Change: Adding additional bandwidth capabilities to 5G NR bands as shown in

this filing

Original Grant Date: 12/19/2022

This equipment has been shown to be capable of compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in FCC KDB 447498 D01. Test results reported herein relate only to the item(s) tested.

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the best of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

RJ Ortanez **Executive Vice President**





Approved by: MAXIMUM PERMISSIBLE EXPOSURE FCC ID: RI7FN990A28 REPORT Technical Manager Test Report S/N: **Test Dates: EUT Type:** Page 1 of 2 1M2306220084-05.RI7 09/22/2023 Module



1.0 SUMMARY

This C2PC application is to add the following additional bandwidth capabilities to the corresponding 5G NR bands:

- 5MHz bandwidth to 5G NR n30
- 10MHz bandwidth to 5G NR n78
- 10MHz bandwidth to 5G NR n48

The maximum allowed conducted power and antenna gains from the original filing are still relevant to this C2PC filing as no changes are made. As such, the following tables show continued compliance for these bands with the enhanced bandwidth capabilities:

Frequency	2305	MHz		
Limit	1.000	mW/cm^2		
Distance (cm), R =	20	cm		
Power (dBm), P =	23	dBm	199.53	mW
TX Ant Gain (dBi), G =	1	dBi		
Power Density (S) =	0.050	mW/cm^2	(at 20cm)	
Minimum Distance =	4.5	cm		

Table 1-1. MPE Calculation for 5G NR Band n30

Frequency:	3450	MHz		
Limit:	1.000	mW/cm^2		
Distance (cm), R =	20	cm		
Power (dBm), P =	27.5	dBm	562.34	mW
TX Ant Gain (dBi), G =	2.5	dBi		
Power Density (S) =	0.199	mW/cm^2	(at 20cm)	
Minimum Distance =	8.9	cm		

Table 1-2. MPE Calculation for 5G NR Band n78

Frequency	3550	MHz		
Limit	1.000	mW/cm^2		
Distance (cm), R =	20	cm		
Power (dBm), P =	22.5	dBm	177.83	mW
TX Ant Gain (dB), G =	0.5	dBi		
Power Density (S) =	0.040	mW/cm^2	(at 20cm)	
Minimum Distance =	4.0	cm		

Table 1-3. MPE Calculation for 5G NR Band n48

The device meets the mobile RF exposure limit at a 20cm separation distance as specified in §2.1091 of the FCC Rules and Regulations and Health Canada Safety Code 6. An appropriate RF exposure compliance statement will be placed in the user's manual.

FCC ID: RI7FN990A28	MAXIMUM PERMISSIBLE EXPOSURE REPORT		Approved by: Technical Manager	
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