



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.:

1M2306220083-05.R17

FCC ID:

RI7FN990A40

APPLICANT:

Telit Communications S.p.A.

Application Type:

Class II Permissive Change

Model:

FN990A40

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



FCC ID: RI7FN990A40		MAXIMUM PERMISSIBLE EXPOSURE REPORT		Approved by: Technical Manager
Test Report S/N: 1M2306220083-05.R17	Test Dates: 09/22/2023	EUT Type: Module	Page 1 of 2	

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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.

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