

Timco Engineering Inc. FCC Authorized Telecommunications Certification Body (TCB)

September 04, 2018

Bruno Clavier- General Manager Timco Engineering Inc. 849 N.W. State Road 45 P.O. Box 370 Newberry, Florida 32669

Dear Mr. Sanders:

The Nokia **TMO V2 SOHO B2B4 (B4 LTE)** is the subject of this request for an FCC Class II Permissive Change Authorization under **FCC ID: H8NSS2FII.** Nokia, hereby requests this Class II change to add NBIoT capability to the Grant. The **TMO V2 SOHO B2B4 (B4 LTE)** is a Small Office Home Office (SOHO) which provides enhanced mobile voice and data service within buildings. It delivers high quality voice calls and faster, more reliable mobile data service.

The **TMO V2 SOHO B2B4 (B4 LTE)** has a power output capability of 125 mW (21.0 dBm) LTE 2x2 MIMO. FCC Grants to-date covers single carrier operation at fundamental bandwidths (BW) of 5 MHz, 10 MHz, 15 MHz and 20 MHz. The objective of this Class II Permissive Change request is to obtain authorization for NBIoT GuardBand Operation, with BWs of 10 MHz, 15 MHz and 20 MHz.

TMO V2 SOHO B2B4 (B4 LTE) operation for NBIoT with Emission Designators **9M67G7D, 14M0G7D and 19M0G7D** is in the **MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES** spectrum for Blocks A through F. The measurement exhibits attached to this application demonstrate full compliance with FCC Part 27, Subpart C following the procedural requirements specified in FCC Part 2, Subpart J – Equipment Authorization Procedures. The data, summarized below, is in the form presently used by the Commission's Radio Equipment List.

Equipment Identification:	H8NSS2FII
Rules Part Number:	Part 27 – MISCELLANEOUS WIRELESS COMMUNICATIONS SERVICES
Frequency Range:	Transmit: 2110 – 2155 MHz; Receive: 1710 – 1755 MHz
Output Power:	125 milliWatts Maximum per Antenna Port
Frequency Tolerance:	± 0.05 ppm
Emission Designators:	9M67G7D, 14M0G7D and 19M0G7D

Attached are the FCC Form 731 (Application for Equipment Authorization – Radio Frequency Devices), the required measurement data and exhibits specific to this request for authorization of the **TMO V2 SOHO B2B4 (B4 LTE)**. The technical or non-technical contact at Nokia will comply with any request for additional information should the need arise. The attached exhibits, with the applicable FCC Rule section, are assembled and presented in accordance with the Table of Contents attachment.

Nokia Building 5A-107 600 Mountain Avenue Murray Hill, NJ 07974 Should there be any questions or procedural issues please feel free to contact me by email and/or phone. Sincerely,

Steve Gurdon

Steve Gordon Member of Technical Staff email: <u>Steve.gordon@nokia-bell-labs.com</u>

Reviewed by:

Kaymond . Johnson

Raymond J. Johnson Technical Manager FCC Compliance Test Group Nokia, Global Product Compliance Laboratory Phone: +1 908 679 6220 email: <u>ray.johnson@nokia-bell-labs.com</u>

Att. Table of Contents for the TMO V2 SOHO B2B4 (B4 LTE) Product Certification Report

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Cover Letter

<u>Exhibit #</u> Exhibit 1	FCC Rule Number Section 2.1033(a)	Description FCC Form 731
Exhibit 2	Section 2.911 (d)	Qualifications and Certifications
Exhibit 3		Setup Photographs
Exhibit 4		Test Report