



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

Nokia
Building 5A-107
600 Mountain Avenue
Murray Hill, NJ 07974

October 12, 2018

Sid Sanders - President
Timco Engineering Inc.
849 N.W. State Road 45
P.O. Box 370
Newberry, Florida 32669

Dear Mr. Sanders:

The Nokia **TMO SOHO V2 B2/B4 SS2FII-Femtocell** is the subject of this request for an FCC Class II Permissive Change Authorization under **FCC ID: H8NSFE3046**. Nokia, hereby requests this Class II change to qualify product for NBLoT and 10, 15, and 20 MHz bandwidth modes for FDD LTE Band 4 due to EOL components requiring a re-spin of the PCB.

The **Femtocell** 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 **Femtocell** has a power output capability of 125 mW (21.0 dBm) LTE 2x2 MIMO. FCC Grants to-date cover single carrier operation at fundamental bandwidths (BW) of 5 MHz, 10 MHz, 15 MHz, 20 MHz and 40 MHz

The **Femtocell** operation for Guard Band NBLoT with Emission Designators **9M45G7D, 14M0G7D and 18M6G7D** 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:	H8NSFE3046
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	9M45G7D, 14M0G7D and 18M6G7D

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 **Femtocell**. 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.

Applicant: Nokia

FCC ID: H8NSFE3046

Should there be any questions or procedural issues please feel free to contact me by email and/or phone.
Sincerely,



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

Reviewed by:



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

Att. Table of Contents for the **Femtocell** Product Certification Report

TABLE OF CONTENTS

Cover Letter

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