

Description of Permissive Change

The application is prepared for FCC class II permissive change for FCC ID: RYK-WNFQ291BEBT (Date of grant: 10/28/2024) the difference with original certification were list as below:

1. Adding a new antenna below:

Newly									
Antenna Set	RF Chain No.	Brand	Model	Antenna Net Gain (dBi)	Frequency Range (GHz)	Antenna Type	Connector Type	Cable Length (mm)	
4	Chain0/1	SparkLAN	AD-513AX	3.11 4.46 4.07 4.53 4.06 4.04 3.97	2.4~2.4835 5.150~5.850 5.850~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	Dipole	I-PEX MHF4	150	
5	Chain0/1	SparkLAN	AD-510AX	2.27 2.88 2.6 3.23 3.34 3.52 3.52	2.4~2.4835 5.150~5.850 5.850~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	Dipole	RP-SMA (M)	150	
6	Chain0/1	SparkLAN	AD-512AX	2.35 3.00 2.80 2.87 3.02 3.02 2.61	2.4~2.4835 5.150~5.850 5.850~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	Dipole	RP-SMA (M)	150	
7	Chain0/1	SparkLAN	AD-516AX	1.65 4.3 3.98 4 4 3.91 3.78	2.4~2.4835 5.150~5.850 5.850~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	Dipole	I-PEX MHF4	250	
8	Chain0/1	Johanson	2450AD18A6050	2 1.5 2.7 2.7 2.7 2.7 2.7	2.4~2.4835 5.150~5.850 5.850~5.895 5.925~6.425 6.425~6.525 6.525~6.875 6.875~7.125	Chip	MHF4L to SMA-F	-	

2. Change shielding case and add thermal pad.
3. Change temperature operating range to -40° C ~85° C

Models difference was listed as below:

Brand	Model	Difference
Sparklan	WNFQ-291BEI(BT)	All models are electrically identical, different model names are for marketing purpose.
	WNFQ-291BE(BT)	

From the above models, model: WNFQ-291BEI(BT) was selected as representative model for the test and its data was recorded in this report.

Except for the changes mentioned above, no other modification is performed.

FCC ID: RYK-WNFQ291BEBT

Emerald

Emerald Chen/ Specialist

Bureau Veritas Consumer Products Services (H.K.) Ltd., Taoyuan Branch

Tel: +886-3-264-1945

Fax: +886-3-327 0892

Email: emerald.chen@bureauveritas.com