

To: Mr. Tim Johnson, American TCB

From: David Waitt

Subject: FCC\_RVW2230 , IC #: 332R-2230 Class II Permissive Change / Reassessment

Date: 7 Febuary, 2005

Attached you will find a Class II Permissive change request for Nortel FCC ID RVW2230. The purpose of this permissive change request is to:

Reclassify operation of the device from UNII to ISM in the band 5725MHz to 5850 MHz.
Operation was previously authorized on 5825MHz with a earlier Class II permissive change while operation on 5725 - 5825MHz was still allowed under the UNII rules.

Authorize additional external antennas for use with the access point radio.

The table below outlines the additional antennas. The antennas actually tested were the:

2.4 GHz: S2403BHN36RTN 2.4 GHz: S2409PN36RTN

5 GHz: S5153BHN36RTN 5 GHz: S5703BHN36RTN

Since they are the highest gain antenna of each type.

It is only necessary to test the highest gain antenna of each type that will be used. Additionally, all of the requested panel antennas, with the exception of the S2409PN36RTN, are of lower gain than the internal antennas that the unit was originally certified with.

## 2.4 GHz Antenna Table

The **s2402Dsn36rtn** and the **s2406Dspn36rtn** are simply dual versions of the 2402 and 2406 antennas. They are simply two antennas in the same housing for antenna diversity applications.

Cushcraft Part number	Freq Band (GHz)	Net Gain (dBi)	Antenna Type	Description	
S2403BHN36RTN	2.4-2.5	4.5	Dipole	Colinear Omin, 2 colocated dipoles	
RTN2400MRA	2.4-2.5	2.0	Dipole	Omni directional dipole antenna	
S2409PN36RTN	2.4-2.5	8.8	Panel	Panel, high gain	
SQ2405DDN36RTN	2.4-2.5	4.0	Panel	Panel, similar to S2409PN	
SL2402PN36RTN	2.4-2.5	2.0	Panel	Panel, similar to S2409PN	
S2402DSN36RTN	2.4-2.5	2.0	Panel	Dual 2402 Panel	
S2406PN36RTN	2.4-2.5	5.5	Panel	Panel, similar to S2409PN	
S2406DSPN36RTN	2.4-2.5	6.5	Panel	Dual 2406 Panel	
SQ2403PN36RTNMO	2.4-2.5	3.0	Panel	Panel, similar to SL2402	

## 5 GHz Antenna Table

Cushcraft Part Number	Freq Band (GHz)	Gain (dBi)	Antenna Type	Description	Tested
S5153BHN36RTN	5.15 - 5.35	4.3	Dipole	Co-located dipoles	YES
S5703BHN36RTN	5.725 - 5.875	4.3	Dipole	Co-located dipoles	YES
RTN5150MRA	5.15 - 5.850	2.1	Dipole	Dipole	NO

If there are any questions or concerns, please do not hesitate to contact me at the email address below.

On behalf of Nortel,

**David Waitt** 

david@waitt.us