



UNII-4 Devices KDB Publication 291074 & Misc.

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Preface

- KDB publication 291074 addresses requirements for UNII-4 (draft version since September 2021). Currently open for comment.
- A CIIPC can be performed to add UNII-4.
- NII equipment class
- Restricted to indoor use



Things to keep in mind

- ❖ Under PAG
- ❖ If you have a device with multiple UNII bands (including UNII-4) it is limited to indoor use even if other bands allow outdoor use. For example, a triband AP supporting UNII-4 is restricted to indoor use even though other bands allow outdoor use. If the manufacturer wants to use 2.4 GHz & 5 GHz outdoors they need to provide details of how the AP knows it is outdoors and prohibits 5.9 GHz operation. You cannot leave it to the end-user.
- ❖ Surveillance cameras fixed outdoors are prohibited from using 5.9 GHz.
- ❖ Requires integrated antennas. Supersedes 15.203
- ❖ If CIIPC is being performed to add UNII-4 the device must have integrated antenna and provide evidence that the device has an existing label stating it is for indoor use only.



Technical Requirements

1. Frequency range: 5850-5895 MHz
2. Power & PSD:

	Power	PSD
Indoor AP	36 dBm EIRP	20 dBm EIRP
Indoor Client	30 dBm EIRP	14 dBm EIRP
Subordinate	36 dBm EIRP	20 dBm EIRP

Note 1: no conducted limit.

Note 2: a channel that spans UNII-3 & 4 needs to meet the UNII-4 rules for power and PSD.

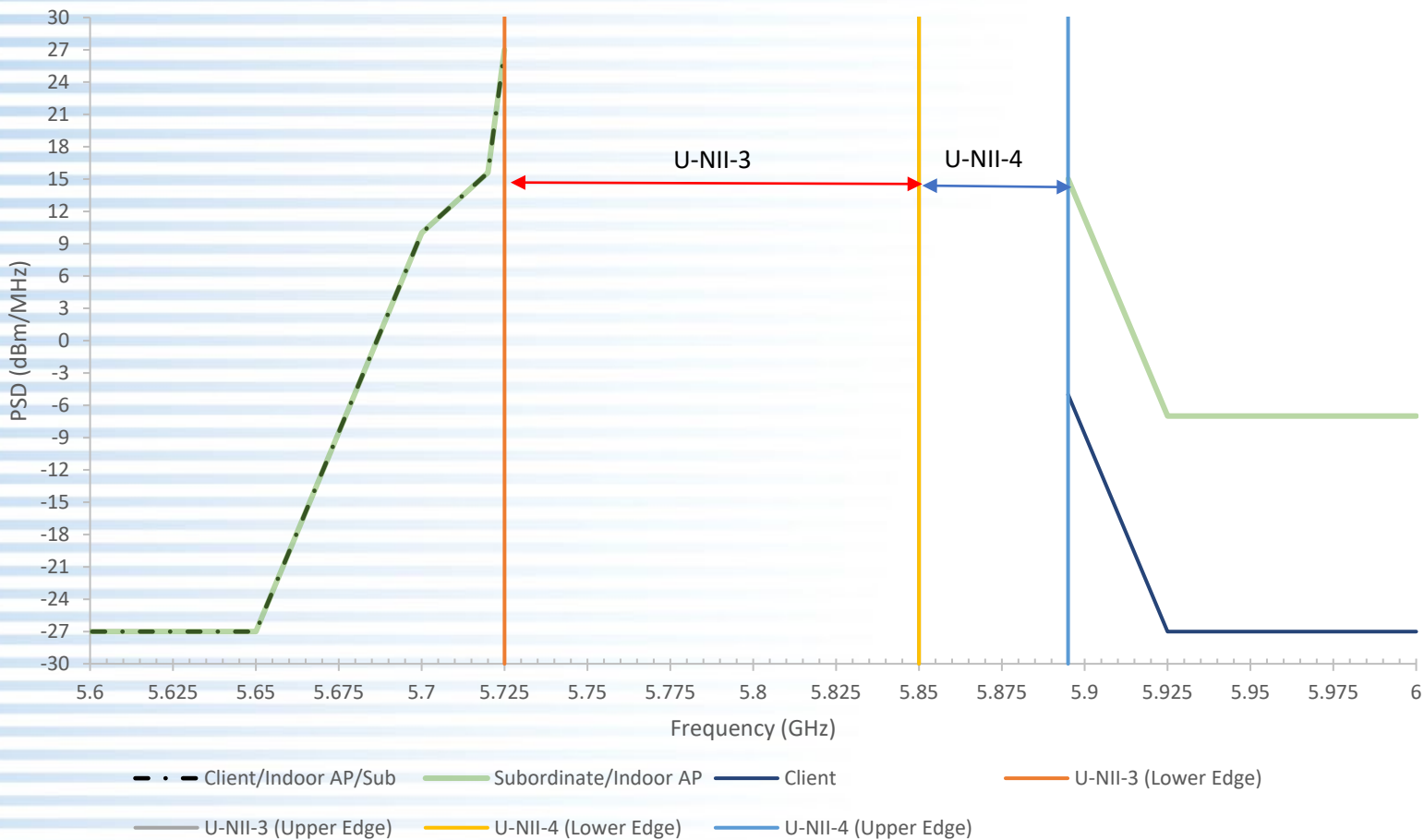
3. Measurement detector: RMS Average

Exception: To meet -27 dBm EIRP below 5725 MHz a Peak detector can be used.



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U-NII-4 Unwanted Emission Levels





Miscellaneous

- §15.521(a) UWB on aircraft and ships not allowed—application for certification needs to detail how this is implemented.



Questions?

THANK YOU