



April 28, 2025

DATA REUSE: KDB inquiry, Tracking Number 718415

- **Introduction:**

- Reference Device is a module classified under 6CD equipment class with **FCC ID PD9AX211NG**
- FCC Rule parts: 15E, Frequency bands: 5955GHz – 7115GHz

- **Justification:**

- Adding an equipment class 6VL via software changes introduced recently in the rules.
- The operational differences between the variant and the reference device is only a mode of operation change by reducing Power/PSD when operating in VLP with dedicated power level.
- See data reuse justification:  
using LPI (Low Power Indoor) and SP (Std Power) Levels as it is the most conservative case compared to VLP (Very Low Power) power.
- The following has been tested and is worst case based on higher output power:
  - Frequency Stability - **FCC Part 15.407 (g)**
  - Undesirable Emissions Limits (OOB, both Conducted and Radiated) - **FCC Part 15.407 (b) (5)**
  - RF Exposure **FCC Part 2.1093**
- Not impacted by output power but already tested:
  - Contention Based Protocol - **FCC Part 15.407 (d) (6)**
- The VLP specific testing would be (due to reduced output power and needs to show compliance to specific VLP requirements limits):
  - In-Band Emissions (Mask) - **FCC Part 15.407 (b) (6)**
  - Occupied Bandwidth – **FCC Part 15.407 (a) (10)**
  - Maximum Output Power – **FCC 15.407 (a) (8)**
  - Power Spectral Density – **FCC 15.407 (a) (8)**



## Cross Reference

Reference Device		Variant Device		Key differences	
FCC ID PD9AX211NG		FCC ID PD9AX211NG		SW change by reducing Power/PSD when operating in VLP	
Items	Rule Part	Test item	Test Report	Data Referencing	Comments
1	15.407 (b) (6)	In-Band Emissions (Mask)	<a href="#">241030-03.TR01</a>	N	Previously certified LPI/SP Levels are the most conservative case as higher power compared to VLP level. <b>Spot-check is unnecessary</b>
2	15.407 (g)	Frequency Stability	<a href="#">200611-01.TR38</a>	Y	Same as item 1. <b>Spot-check is unnecessary</b>
3	15.407 (b) (5)	Undesirable Emissions Limits (Out of Band, both Conducted and Radiated)	<a href="#">200611-01.TR38</a> <a href="#">200611-01.TR39</a>	Y	Same as item 1. <b>Spot-check is unnecessary</b>
4	2.1093	RF Exposure	<a href="#">240513-03.TR01</a>	Y	Same as item 1. <b>Spot-check is unnecessary</b>
5	15.407 (d) (6)	Contention Based Protocol	<a href="#">2200611-01.TR38</a> <a href="#">210730-02.TR03</a>	Y	Not impacted by output power. <b>Spot-check is unnecessary</b>
6	15.407 (a) (10)	Occupied Bandwidth	<a href="#">241030-03.TR01</a>	N	Impacted by output power reduction
7	15.407 (a) (8)	Maximum Output Power	<a href="#">241030-03.TR01</a>	N	Same as item 6
8	15.407 (a) (8)	Power Spectral Density	<a href="#">241030-03.TR01</a>	N	Same as item 6
9	15.407 (a) (8)	Transmit Power Control	<a href="#">241030-03.TR01</a>	N	Refer to TPC operational description