



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)	241030-03.TR01	N	Previously certified LPI/SP Levels are the most conservative case as higher power compared to VLP level. Spot-check is unnecessary
2	15.407 (g)	Frequency Stability	200611-01.TR38	Y	Same as item 1. Spot-check is unnecessary
3	15.407 (b) (5)	Undesirable Emissions Limits (Out of Band, both Conducted and Radiated)	200611-01.TR38 200611-01.TR39	Y	Same as item 1. Spot-check is unnecessary
4	2.1093	RF Exposure	240513-03.TR01	Y	Same as item 1. Spot-check is unnecessary
5	15.407 (d) (6)	Contention Based Protocol	2200611-01.TR38 210730-02.TR03	Y	Not impacted by output power. Spot-check is unnecessary
6	15.407 (a) (10)	Occupied Bandwidth	241030-03.TR01	N	Impacted by output power reduction
7	15.407 (a) (8)	Maximum Output Power	241030-03.TR01	N	Same as item 6
8	15.407 (a) (8)	Power Spectral Density	241030-03.TR01	N	Same as item 6
9	15.407 (a) (8)	Transmit Power Control	241030-03.TR01	N	Refer to TPC operational description