

High Speed CCL Library

Updated to 2022.11

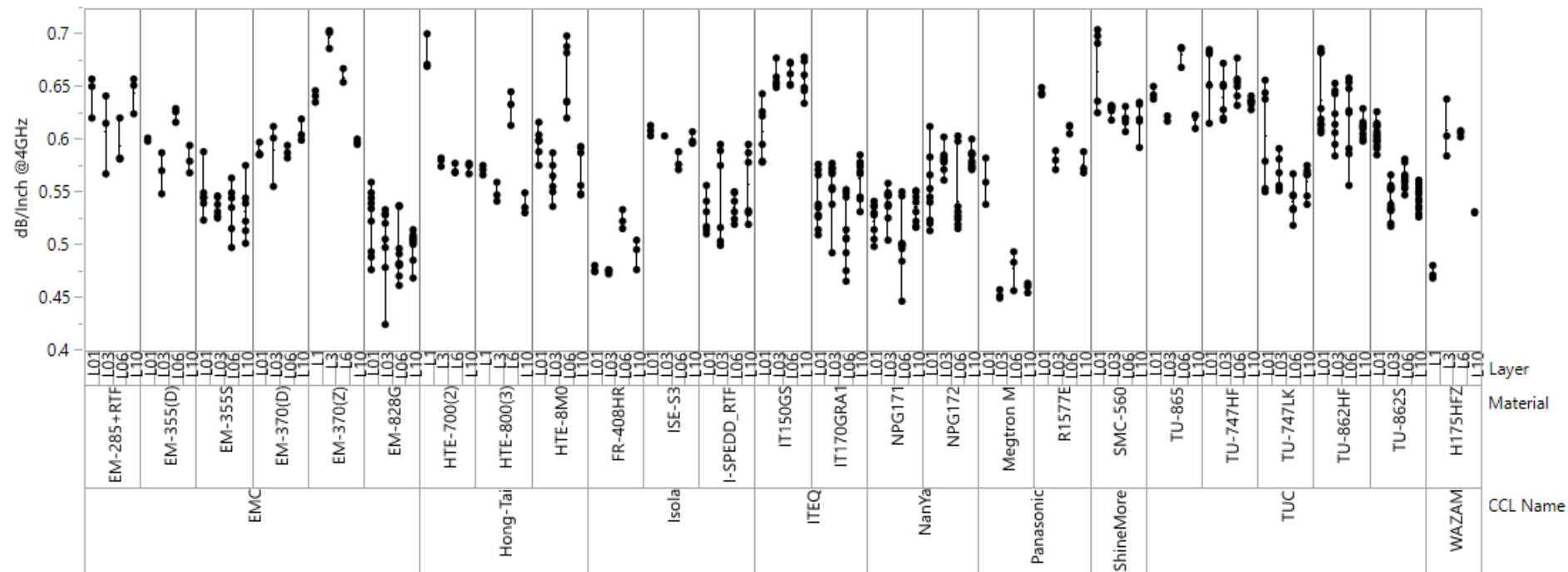
- **Mid-Low Loss**
- **Low Loss**
- **Ultra-Low Loss**

Mid-loss Material Library

- Impedance Range: 85 ohms +/- 10%
- L1: HTE copper foil type
- Stack up: 12L
- Testing Metrology: Delta-L
- One point indicates a test material made by one PCB shop, and it's an average data of 3 samples.

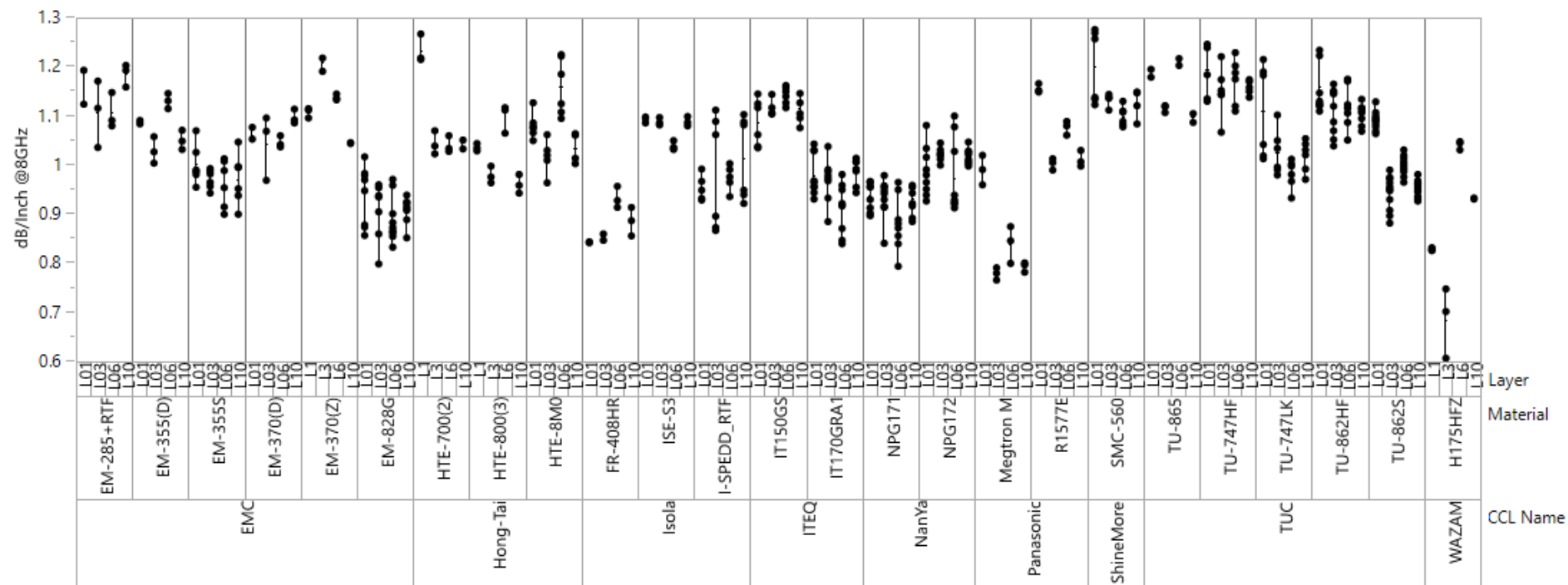
Distribution of Electrical Characteristics (I) Individual

Distribution at 4GHz



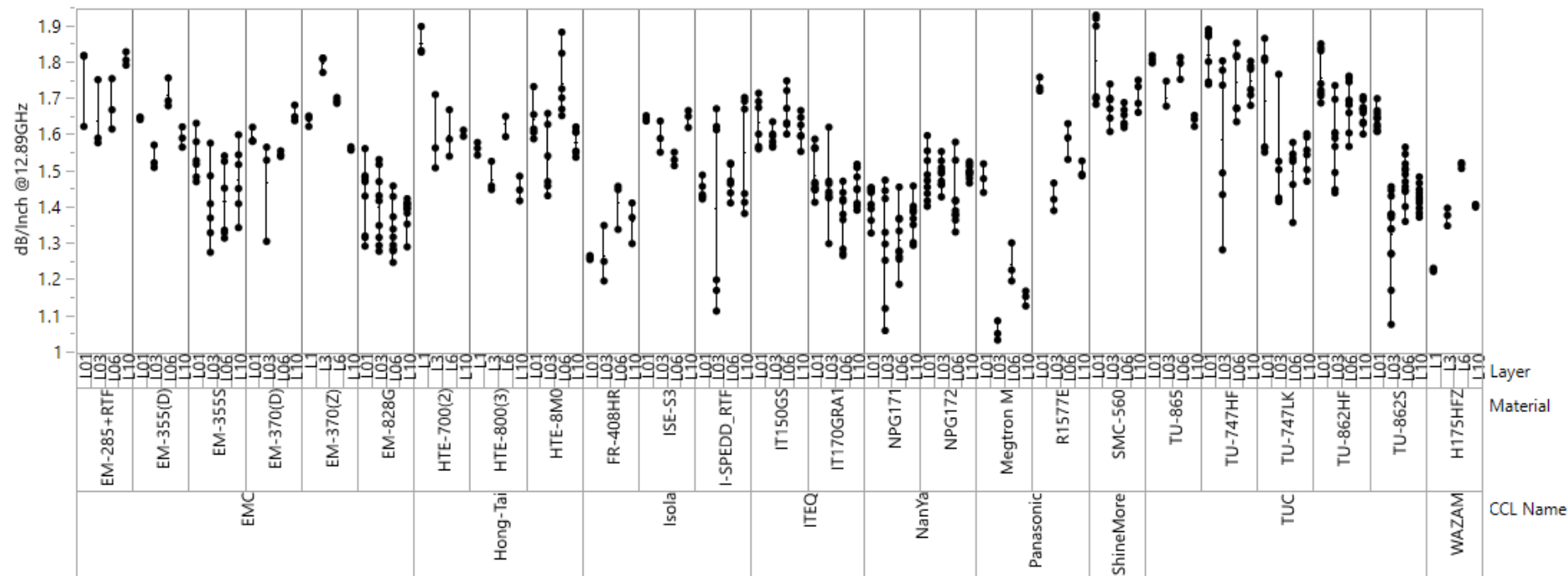
Impedance Range: 85 ohms +/- 10%

Distribution at 8GHz



Impedance Range: 85 ohms +/- 10%

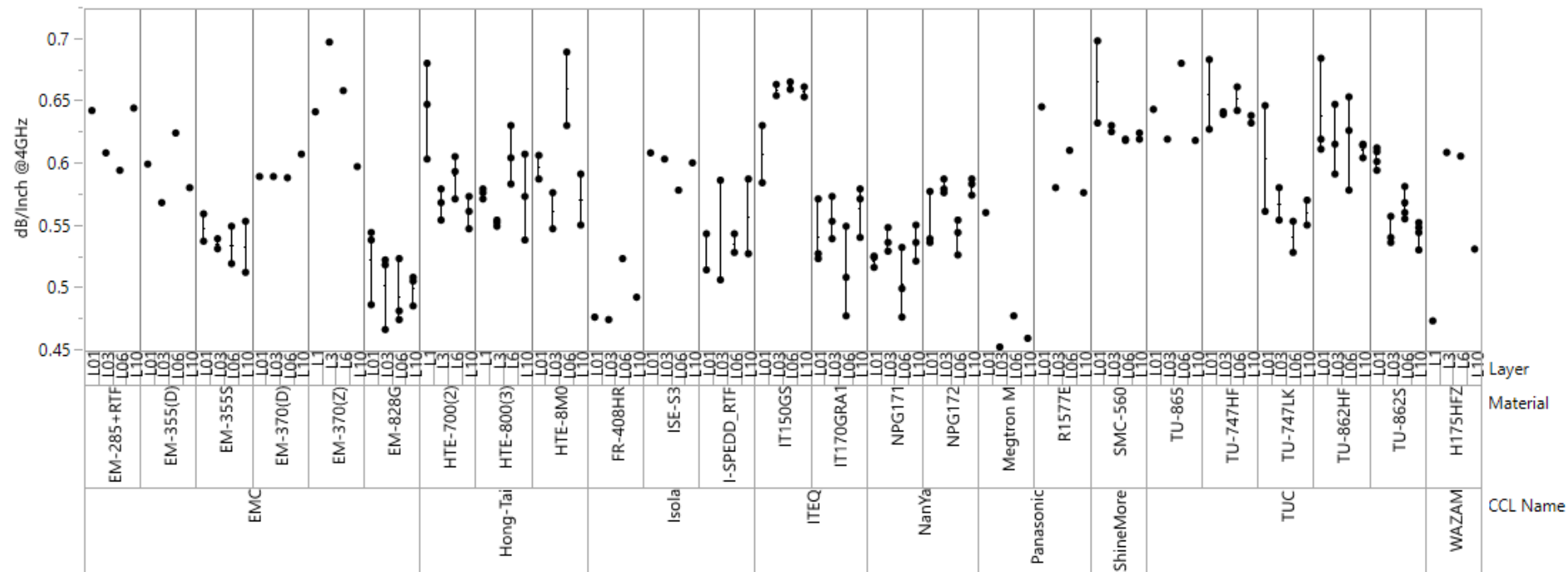
Distribution at 12.89GHz



Impedance Range: 85 ohms +/- 10%

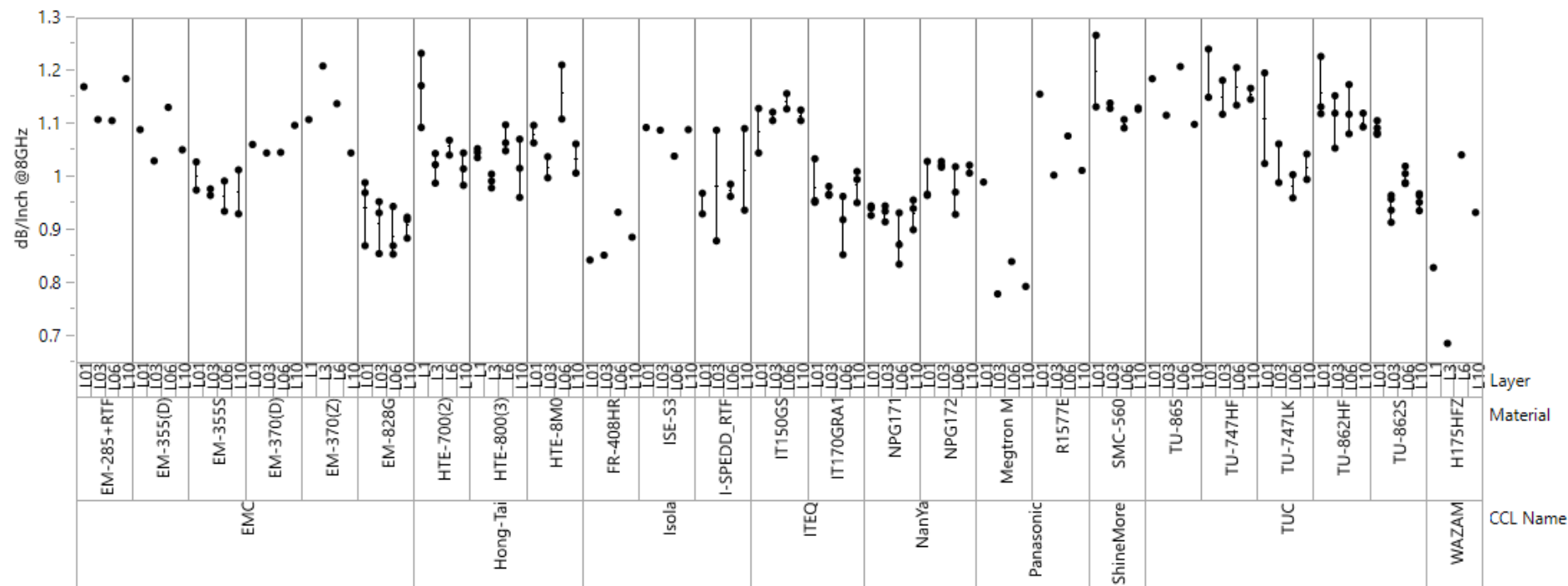
Distribution of Electrical Characteristics (II) Average Value from 3 pcs

Distribution at 4GHz



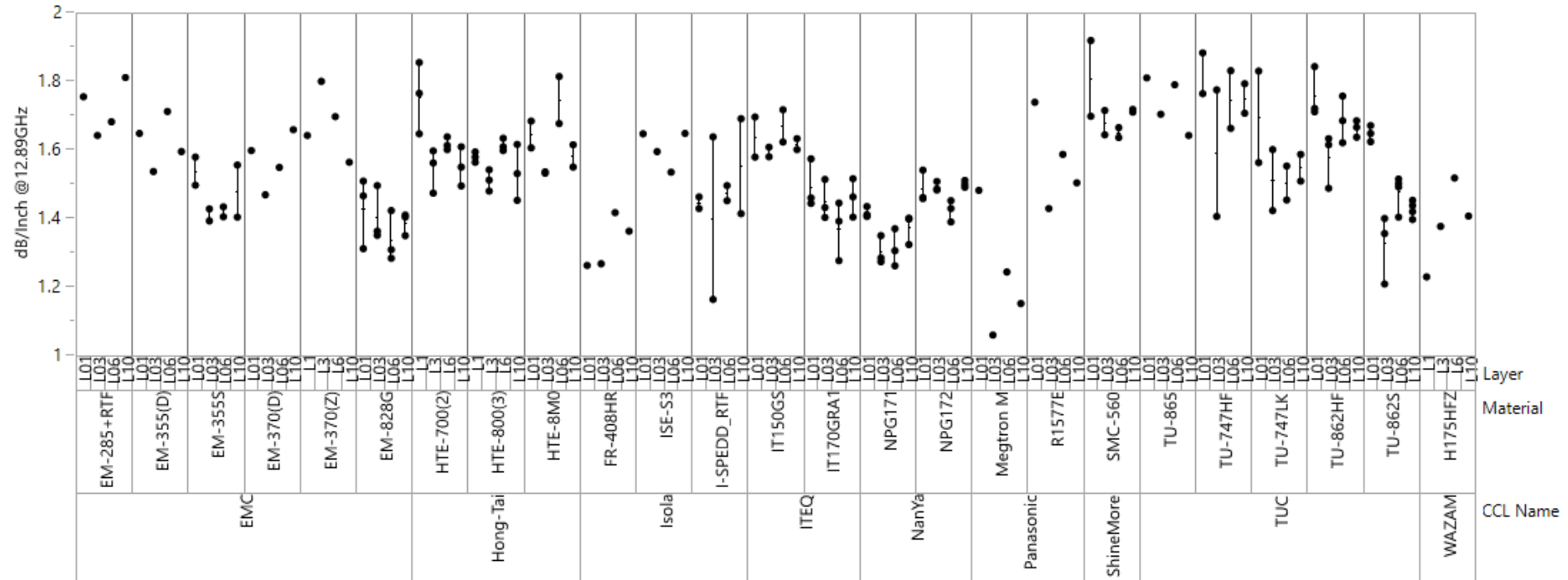
Impedance Range: 85 ohms +/- 10%

Distribution at 8GHz



Impedance Range: 85 ohms +/- 10%

Distribution at 12.89GHz



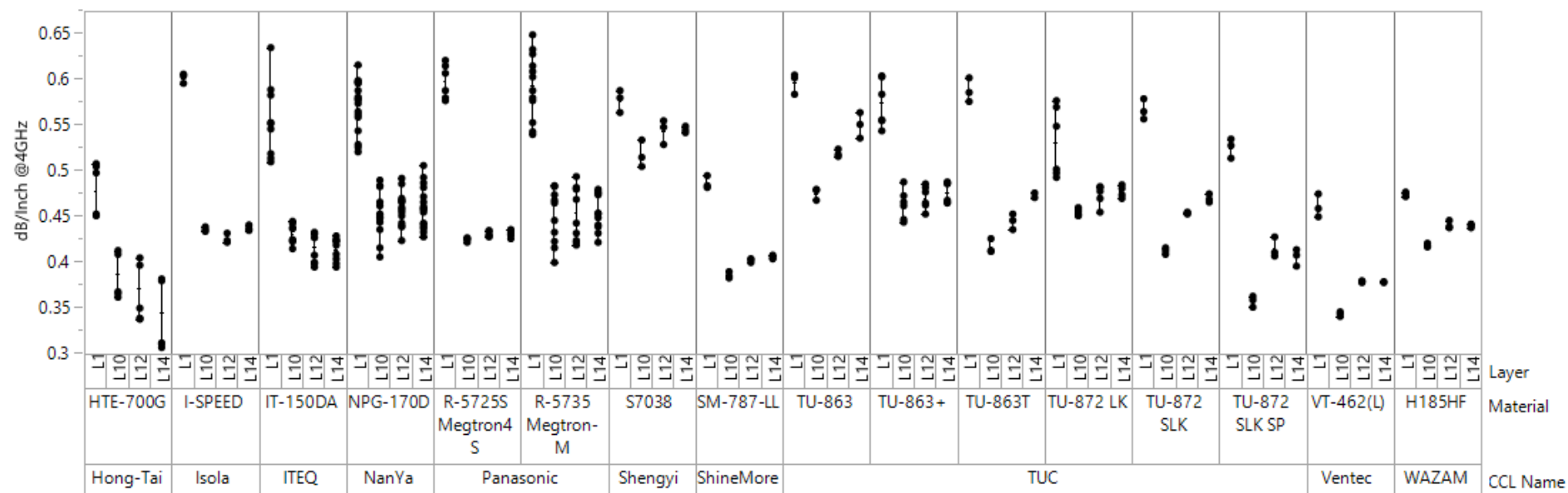
Impedance Range: 85 ohms +/- 10%

Low-loss Material Library

- Impedance Range: 85 ohms +/- 10%
- L1: HTE copper foil type
- Stack up: 16 L
- Testing Metrology: Delta-L
- One point indicates a test material made by one PCB shop, and it's an average data of 3 samples.

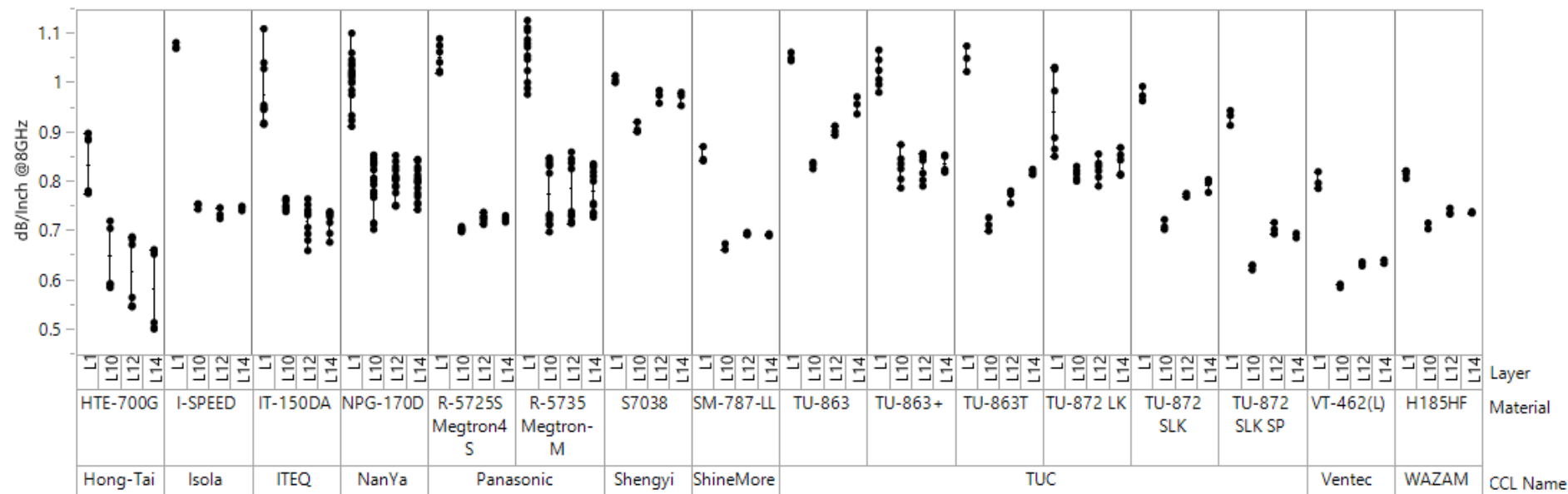
Distribution of Electrical Characteristics (I) Individual

Distribution at 4GHz



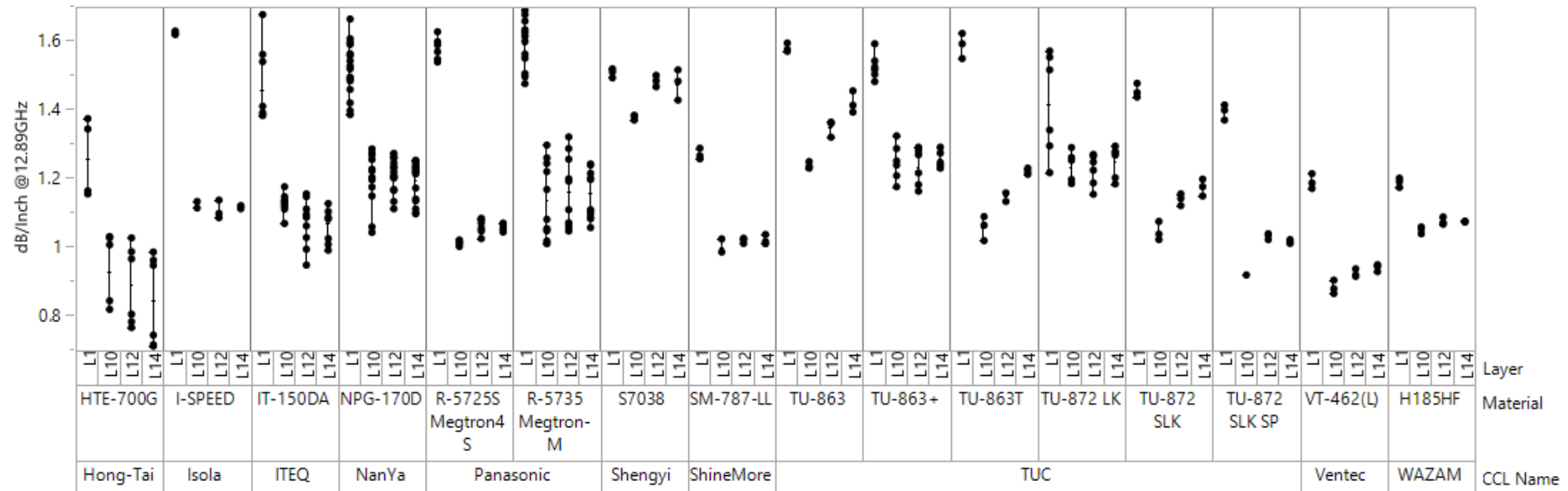
Impedance Range: 85 ohms +/- 10%

Distribution at 8GHz



Impedance Range: 85 ohms +/- 10%

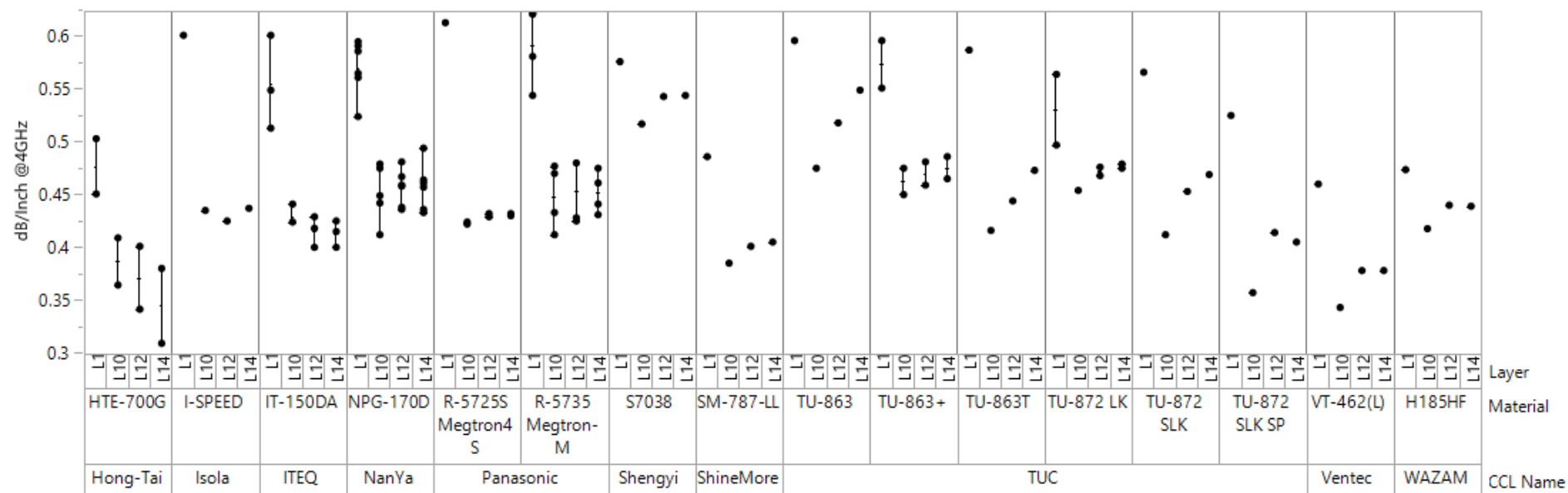
Distribution at 12.89GHz



Impedance Range: 85 ohms +/- 10%

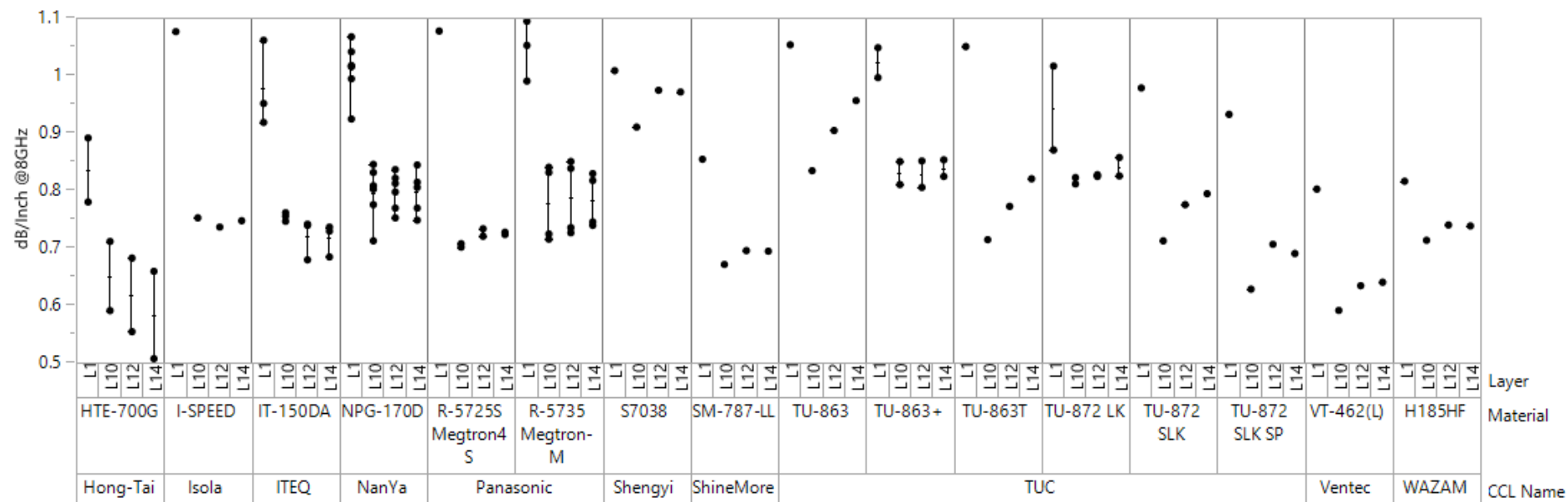
Distribution of Electrical Characteristics (II) Average Value from 3 pcs

Distribution at 4GHz



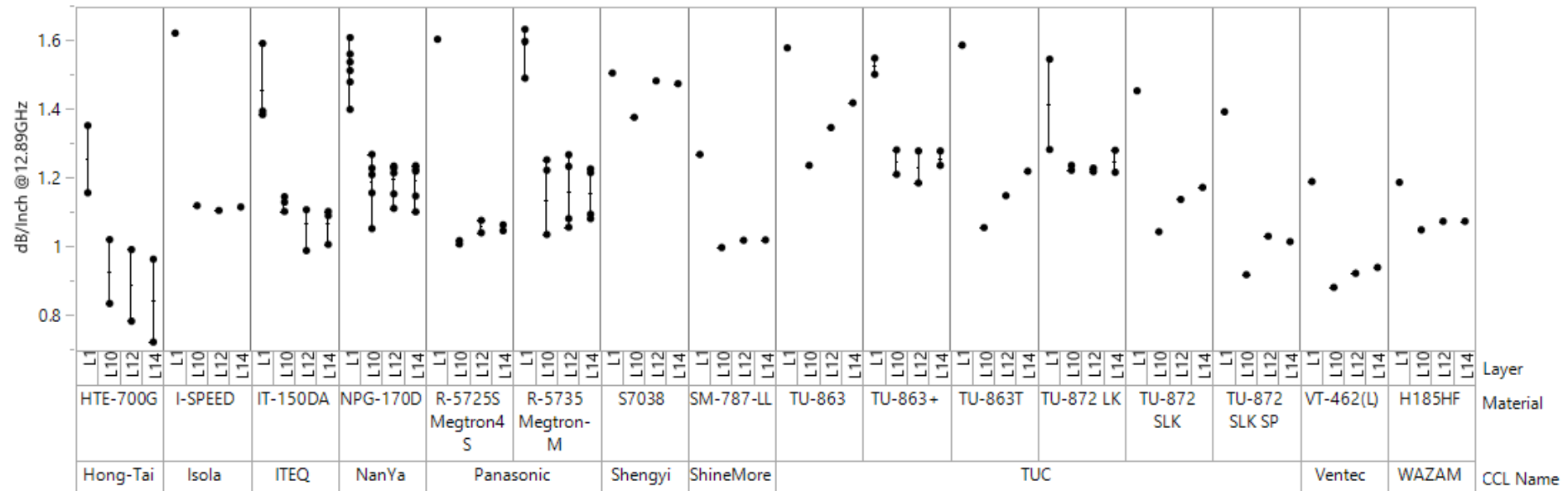
Impedance Range: 85 ohms +/- 10%

Distribution at 8GHz



Impedance Range: 85 ohms +/- 10%

Distribution at 12.89GHz



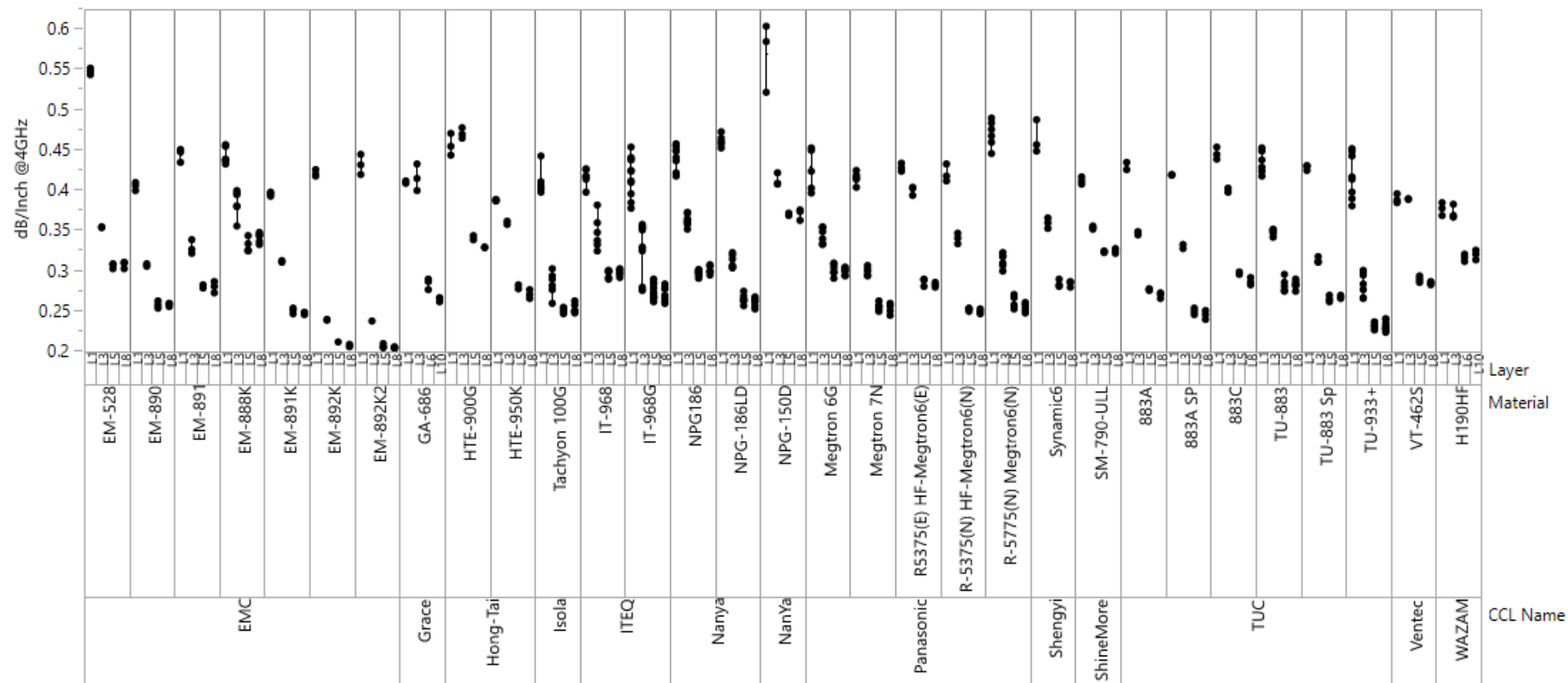
Impedance Range: 85 ohms +/- 10%

Ultra Low-loss Material Library

- Impedance Range: 85 ohms +/- 10%
- L1: HTE copper foil type
- Stack up: 12 L
- Testing Metrology: Delta-L
- One point indicates a test material made by one PCB shop, and it's an average data of 3 samples.

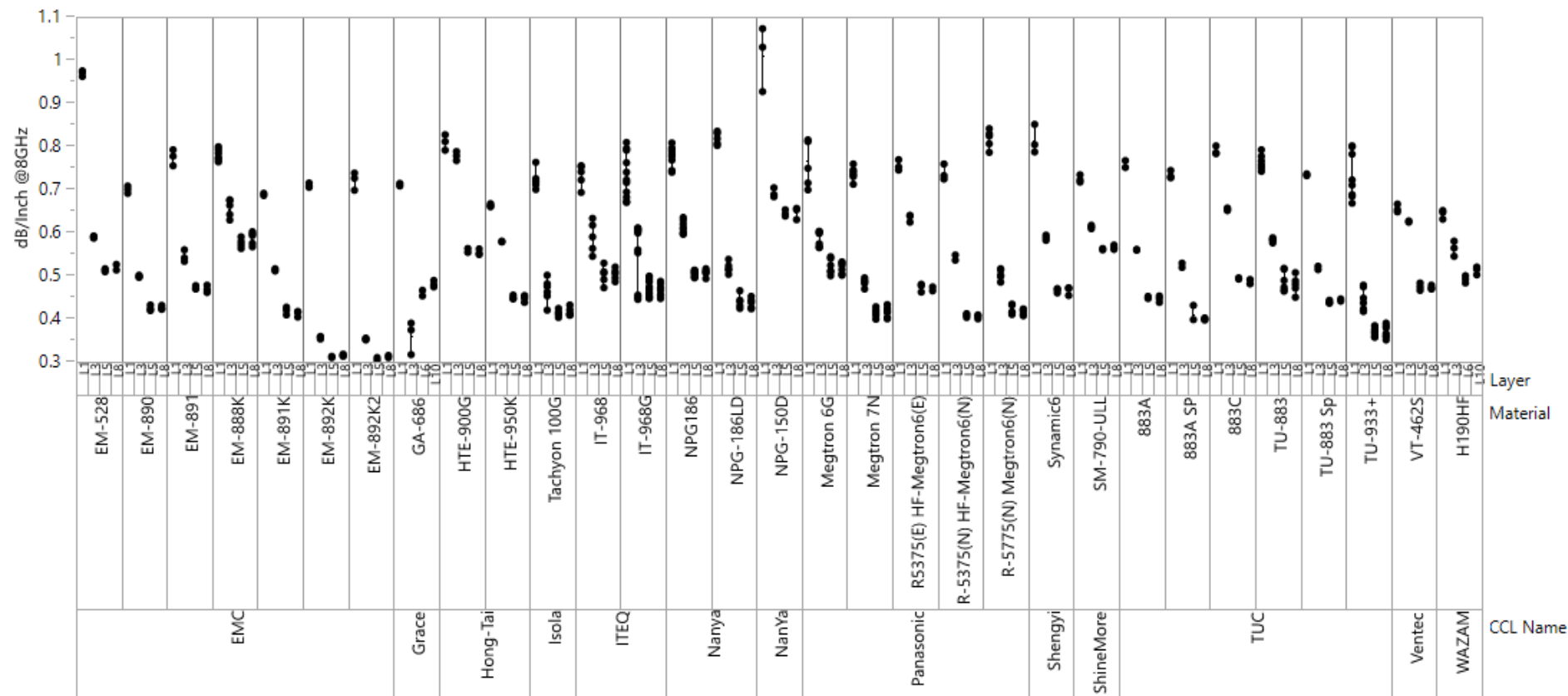
Distribution of Electrical Characteristics (I) Individual

Distribution at 4GHz



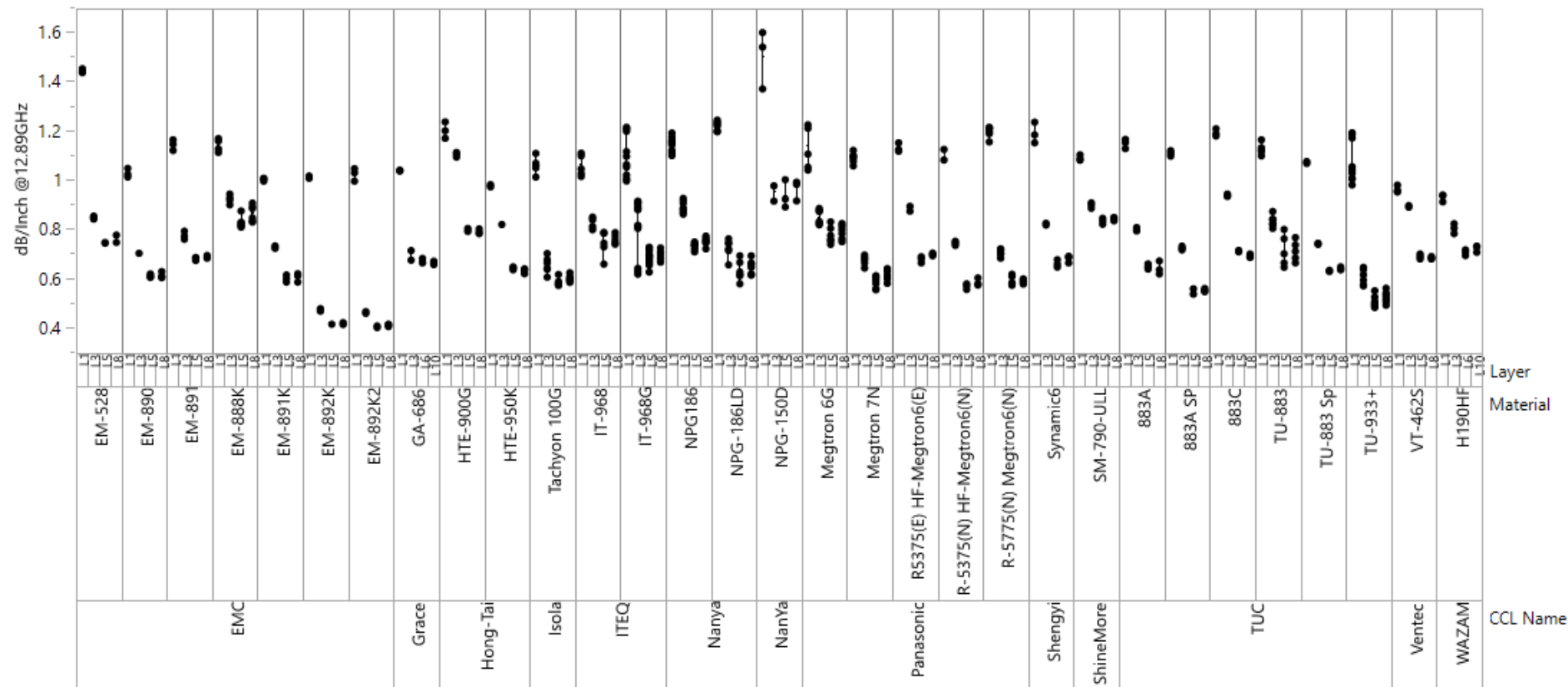
Impedance Range: 85 ohms +/- 10%

Distribution at 8GHz



Impedance Range: 85 ohms +/- 10%

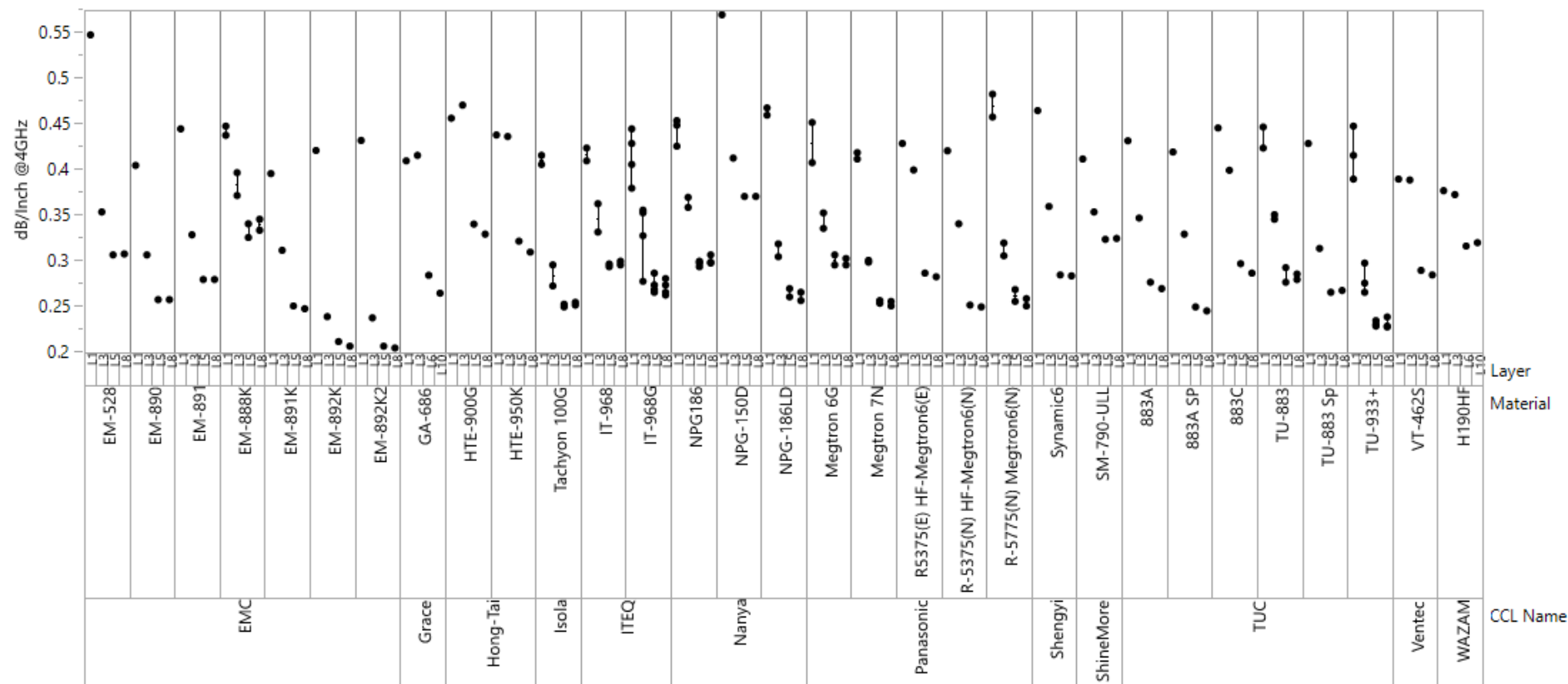
Distribution at 12.89GHz



Impedance Range: 85 ohms +/- 10%

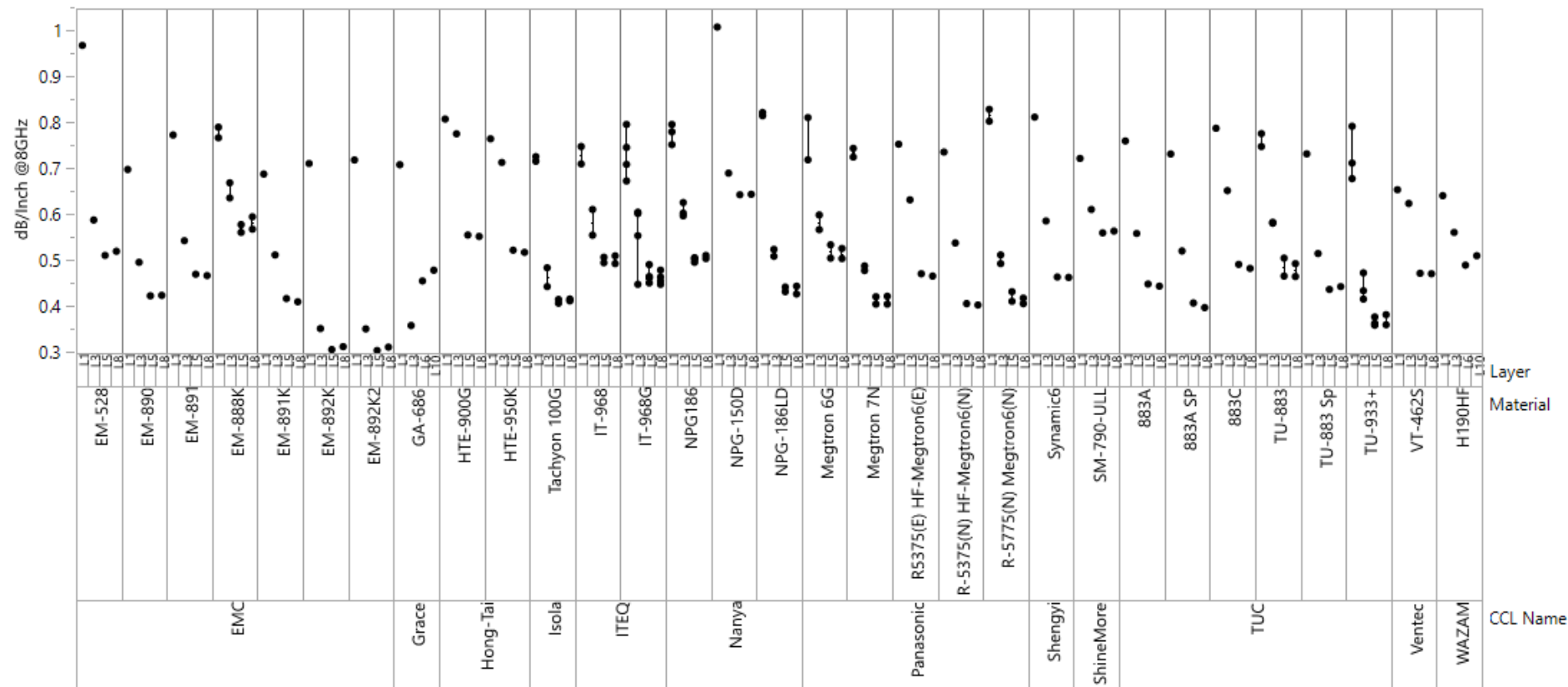
Distribution of Electrical Characteristics (II) Average Value from 3 pcs

Distribution at 4GHz



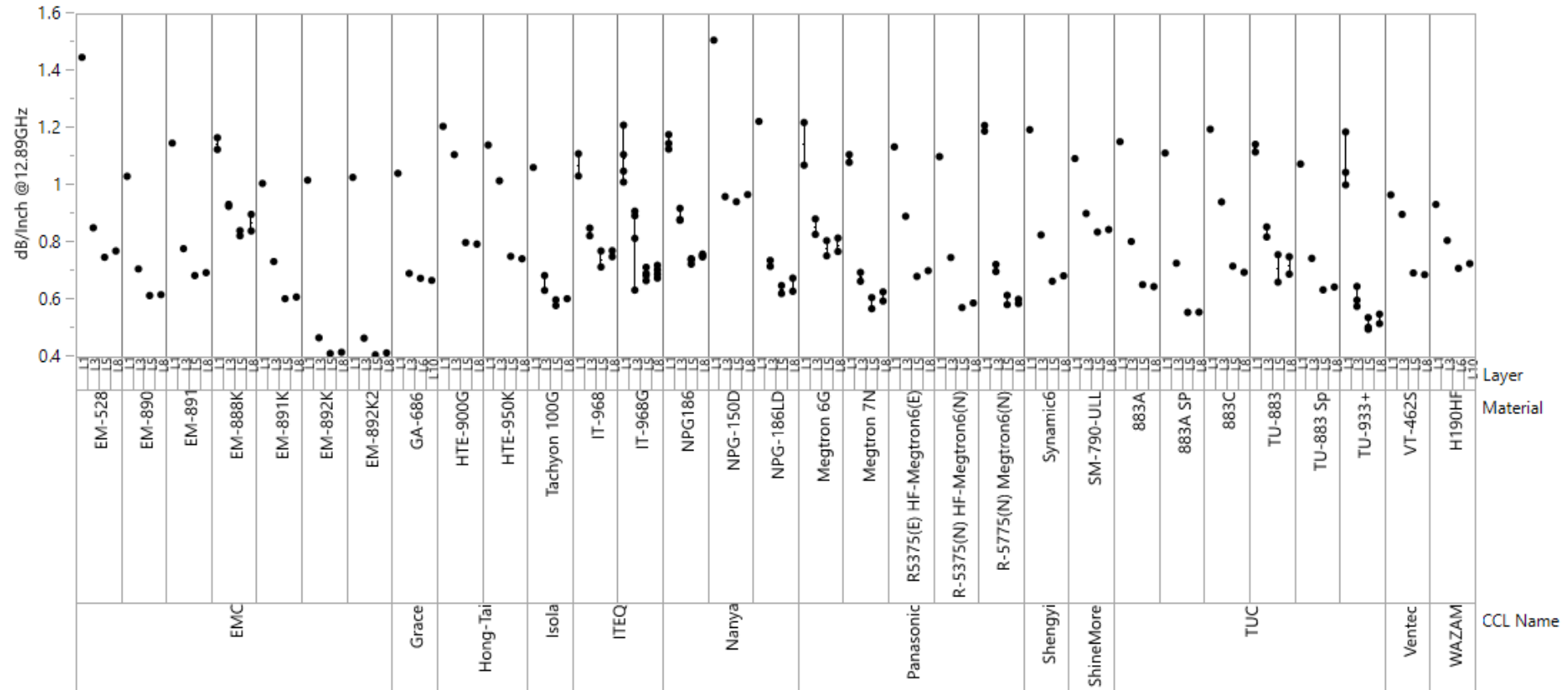
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Distribution at 8GHz



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