mmWave Compliance Measurements

Office of Engineering and Technology
Laboratory Division
April 2018
mmWave Panel Members

- Steve Jones, FCC Lab
  - Panel Moderator
  - C63.26 WG Chair
- Robert Paxman, Intel
  - C63.10/.26 JTG Chair
- Mike Heckrotte, UL
- Steve Majkowski, Nokia
- Daniel Pino, PCTest
- Reza Biazzaran, FCC Lab
- Hughes Nappert, ISED
Panel Discussion Topics

Near Field/Far Field Considerations, particularly w.r.t. mmWave base stations
- EIRP vs. TRP
- Measurement of individual sub-array with subsequent combination
- Other possibilities

TRP Measurements of unwanted emission levels
- Two step approach – measure EIRP first, and then TRP when necessary, only at identified problematic frequencies
- Trade off between minimizing uncertainties and measurement time and effort

Pre-scan procedures with downconverters at far-field distances

Conversion of radiated power measurement (EIRP) to equivalent conducted power

Methods for characterizing maximum antenna gain and directivity of a MIMO antenna array
- Measurement, modeling, attestation
- Responsibilities for accuracy