

Appendix B: System Check

B.1. System Check

Prior to power density assessments, the system is verified to ± 0.66 dB of the power density measurement on the verification source at the time of calibration by the calibration facility. The grid step and grid size used during the system check measurements are the same as during calibration. System check results were compared both numerically and visually to the calibration certificate. Due to the external housing structure of the verification source, a value of 5.55mm was used in the measurement software to ensure a total of 10mm distance between the reference source antenna and measurement probe.

Table B-1
System Check Results

| Date | Probe SN | Frequency (MHz) | Source SN | Measured Normal psPD (W/m^2) | Target Normal psPD (W/m^2) | Deviation Normal psPD (dB) | Measured Total psPD (W/m^2) | Target Total psPD (W/m^2) | Deviation Total psPD (dB) | Test Plot |
|-----------|----------|-----------------|-----------|----------------------------------|--------------------------------|----------------------------|---------------------------------|-------------------------------|---------------------------|-----------|
| 1/23/2024 | 9690 | 30000.0 | 1114 | 112.00 | 103.00 | 0.36 | 114.00 | 105.00 | 0.36 | C1 |
| 1/28/2024 | 9690 | 30000.0 | 1114 | 113.00 | 103.00 | 0.40 | 115.00 | 105.00 | 0.40 | C2 |
| 2/27/2024 | 9690 | 30000.0 | 1114 | 115.00 | 103.00 | 0.48 | 118.00 | 105.00 | 0.51 | C3 |