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|  <b>MOTOROLA SOLUTIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |     <p style="margin-top: 5px;">SMM 826</p> |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| <b>SAR TEST REPORT</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           |                                                                                                                                                                                                                                                                                                                                                                                      |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| Motorola Solutions Inc.<br>EME Test Laboratory<br>Motorola Solutions Malaysia Sdn Bhd<br>Plot 2A, Medan Bayan Lepas,<br>Mukim 12 SWD 11900 Bayan Lepas Penang, Malaysia.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | Date of Report: 06/16/2026<br>Report Revision: C                                                                                                                                                                                                                                                                                                                                     |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| <table style="width: 100%; border: none;"> <tr> <td style="width: 30%;">Responsible Engineer:</td> <td>Yeng Yee Yeong (EME Engineer)</td> </tr> <tr> <td>Report Author:</td> <td>Muhammad Hizami bin Ismail (Senior Technician)</td> </tr> <tr> <td>Date/s Tested:</td> <td>04/25/2026 - 04/28/2026, 05/13/2026 – 05/16/2026</td> </tr> <tr> <td>Test Location:</td> <td>Penang EME Laboratory</td> </tr> <tr> <td>Manufacturer:</td> <td>Motorola Solutions Malaysia Sdn Bhd.</td> </tr> <tr> <td>Manufacturer Location:</td> <td>Plot 2A, Medan Bayan Lepas Mukim, 12 SWD, 11900 Bayan Lepas, Penang, Malaysia</td> </tr> <tr> <td>Hardware Receive Date:</td> <td>04/23/2026</td> </tr> <tr> <td>DUT Description:</td> <td>Handheld Portable – TANAPA BPR 45 400-470 MHZ 4W NKP</td> </tr> <tr> <td>Test TX mode(s):</td> <td>CW (PTT)</td> </tr> <tr> <td>Max. Power output:</td> <td>Refer table 3</td> </tr> <tr> <td>Tx Frequency Bands:</td> <td>Refer table 3</td> </tr> <tr> <td>Signaling type:</td> <td>Refer table 3</td> </tr> <tr> <td>Model(s) Tested:</td> <td>AAH88SCK8AA3AN</td> </tr> <tr> <td>Model(s) Certified:</td> <td>Refer 1.0 Introduction</td> </tr> <tr> <td>(HVIN/PMN)</td> <td></td> </tr> <tr> <td>Serial Number(s):</td> <td>46326CG0037</td> </tr> <tr> <td>Classification:</td> <td>Occupational/Controlled Environment</td> </tr> <tr> <td>Applicant Name:</td> <td>Motorola Solutions Inc.</td> </tr> <tr> <td>Applicant Address:</td> <td>Plot 2A, Medan Bayan Lepas Mukim, 12 SWD, 11900 Bayan Lepas, Penang, Malaysia</td> </tr> <tr> <td>Firmware Version (FVIN):</td> <td>T0.00.07</td> </tr> <tr> <td>FCC ID:</td> <td>AZ489FT4981</td> </tr> <tr> <td></td> <td>This report contains results that are immaterial for FCC equipment approval, which are clearly identified.</td> </tr> <tr> <td>FCC Test Firm Registration Number:</td> <td>823256</td> </tr> <tr> <td>IC:</td> <td>109U-89FT4981</td> </tr> <tr> <td></td> <td>This report contains results that are immaterial for ISED equipment approval, which are clearly identified.</td> </tr> <tr> <td>ISED Test Site registration:</td> <td>24843</td> </tr> </table> <p>The test results clearly demonstrate compliance with Occupational/Controlled RF Exposure limits of 8 W/kg averaged over 1 gram per the requirements of FCC 47 CFR § 2.1093 and RSS-102 (Issue 6)</p> <p style="color: blue; font-size: small;">Based on the information and the testing results provided herein, the undersigned certifies that when used as stated in the operating instructions supplied, said product complies with the national and international reference standards and guidelines listed in section 4.0 of this report (no deviation from standard methods). This report shall not be reproduced without written approval from an officially designated representative of the Motorola Solutions Inc EME Laboratory. I attest to the accuracy of the data and assume full responsibility for the completeness of these measurements. The results and statements contained in this report pertain only to the device(s) evaluated.</p> <div style="text-align: center; margin-top: 20px;"> <br/>       Saw Sun Hock (Approval Signatory)<br/>       Approved Date: 06/16/2026     </div> |                                                                                                                                                                                                                                                                                                                                                                                      | Responsible Engineer: | Yeng Yee Yeong (EME Engineer) | Report Author: | Muhammad Hizami bin Ismail (Senior Technician) | Date/s Tested: | 04/25/2026 - 04/28/2026, 05/13/2026 – 05/16/2026 | Test Location: | Penang EME Laboratory | Manufacturer: | Motorola Solutions Malaysia Sdn Bhd. | Manufacturer Location: | Plot 2A, Medan Bayan Lepas Mukim, 12 SWD, 11900 Bayan Lepas, Penang, Malaysia | Hardware Receive Date: | 04/23/2026 | DUT Description: | Handheld Portable – TANAPA BPR 45 400-470 MHZ 4W NKP | Test TX mode(s): | CW (PTT) | Max. Power output: | Refer table 3 | Tx Frequency Bands: | Refer table 3 | Signaling type: | Refer table 3 | Model(s) Tested: | AAH88SCK8AA3AN | Model(s) Certified: | Refer 1.0 Introduction | (HVIN/PMN) |  | Serial Number(s): | 46326CG0037 | Classification: | Occupational/Controlled Environment | Applicant Name: | Motorola Solutions Inc. | Applicant Address: | Plot 2A, Medan Bayan Lepas Mukim, 12 SWD, 11900 Bayan Lepas, Penang, Malaysia | Firmware Version (FVIN): | T0.00.07 | FCC ID: | AZ489FT4981 |  | This report contains results that are immaterial for FCC equipment approval, which are clearly identified. | FCC Test Firm Registration Number: | 823256 | IC: | 109U-89FT4981 |  | This report contains results that are immaterial for ISED equipment approval, which are clearly identified. | ISED Test Site registration: | 24843 |
| Responsible Engineer:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | Yeng Yee Yeong (EME Engineer)                                                                                                                                                                                                                                                                                                                                                        |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| Report Author:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Muhammad Hizami bin Ismail (Senior Technician)                                                                                                                                                                                                                                                                                                                                       |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| Date/s Tested:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | 04/25/2026 - 04/28/2026, 05/13/2026 – 05/16/2026                                                                                                                                                                                                                                                                                                                                     |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| Test Location:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | Penang EME Laboratory                                                                                                                                                                                                                                                                                                                                                                |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| Manufacturer:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                    | Motorola Solutions Malaysia Sdn Bhd.                                                                                                                                                                                                                                                                                                                                                 |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| Manufacturer Location:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | Plot 2A, Medan Bayan Lepas Mukim, 12 SWD, 11900 Bayan Lepas, Penang, Malaysia                                                                                                                                                                                                                                                                                                        |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| Hardware Receive Date:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                           | 04/23/2026                                                                                                                                                                                                                                                                                                                                                                           |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| DUT Description:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | Handheld Portable – TANAPA BPR 45 400-470 MHZ 4W NKP                                                                                                                                                                                                                                                                                                                                 |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| Test TX mode(s):                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | CW (PTT)                                                                                                                                                                                                                                                                                                                                                                             |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| Max. Power output:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Refer table 3                                                                                                                                                                                                                                                                                                                                                                        |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| Tx Frequency Bands:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Refer table 3                                                                                                                                                                                                                                                                                                                                                                        |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| Signaling type:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Refer table 3                                                                                                                                                                                                                                                                                                                                                                        |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| Model(s) Tested:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | AAH88SCK8AA3AN                                                                                                                                                                                                                                                                                                                                                                       |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| Model(s) Certified:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | Refer 1.0 Introduction                                                                                                                                                                                                                                                                                                                                                               |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| (HVIN/PMN)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       |                                                                                                                                                                                                                                                                                                                                                                                      |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
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| Applicant Name:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  | Motorola Solutions Inc.                                                                                                                                                                                                                                                                                                                                                              |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
| Applicant Address:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | Plot 2A, Medan Bayan Lepas Mukim, 12 SWD, 11900 Bayan Lepas, Penang, Malaysia                                                                                                                                                                                                                                                                                                        |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
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| FCC Test Firm Registration Number:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                               | 823256                                                                                                                                                                                                                                                                                                                                                                               |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |
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| ISED Test Site registration:                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | 24843                                                                                                                                                                                                                                                                                                                                                                                |                       |                               |                |                                                |                |                                                  |                |                       |               |                                      |                        |                                                                               |                        |            |                  |                                                      |                  |          |                    |               |                     |               |                 |               |                  |                |                     |                        |            |  |                   |             |                 |                                     |                 |                         |                    |                                                                               |                          |          |         |             |  |                                                                                                            |                                    |        |     |               |  |                                                                                                             |                              |       |

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## APPENDICES

- A Measurement Uncertainty Budget
- B Probe Calibration Certificates
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- D System Verification Check Scans
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## EX7B

## APPENDICES

DUT Test Position Photos

DUT, Body worn and audio accessories Photos

## Report Revision History

| Date       | Revision | Comments                                                     |
|------------|----------|--------------------------------------------------------------|
| 05/18/2026 | A        | Initial release                                              |
| 06/12/2026 | B        | Updated Appendix D and Appendix E for improved image clarity |
| 06/16/2026 | C        | Updated Product Marketing Name (PMN) under section 1.0       |

## 1.0 Introduction

This report details the utilization, test setup, test equipment, and test results of the Specific Absorption Rate (SAR) measurements performed at the Motorola Solutions Inc. EME Test Laboratory for handheld portable model number AAH88SCK8AA3AN. This device is classified as Occupational/Controlled and model certified is listed as below:

| Models         | Hardware Version ID Number (HVIN) | Product Marketing Name (PMN) | Description                      |
|----------------|-----------------------------------|------------------------------|----------------------------------|
| AAH88SCK8AA3AN | AAH88SCK8AA3AN                    | BPR 45                       | TANAPA BPR 45 400-470 MHZ 4W NKP |

## 2.0 FCC SAR Summary

Table 1

| Equipment Class | Frequency band (MHz) | Max Calc at Body (W/kg) | Max Calc at Face (W/kg) |
|-----------------|----------------------|-------------------------|-------------------------|
|                 |                      | 1g-SAR                  | 1g-SAR                  |
| TNF             | 406.125 - 512        | 4.62                    | 3.26                    |

## 3.0 Abbreviations / Definitions

|      |                                                 |
|------|-------------------------------------------------|
| CNR: | Calibration Not Required                        |
| CW:  | Continuous Wave                                 |
| DUT: | Device Under Test                               |
| EME: | Electromagnetic Energy                          |
| FM:  | Frequency Modulation                            |
| LMR: | Land Mobile Radio                               |
| NA:  | Not Applicable                                  |
| PTT: | Push to Talk                                    |
| RSM: | Remote Speaker Microphone                       |
| SAR: | Specific Absorption Rate                        |
| TNF: | Licensed Non-Broadcast Transmitter Held to Face |

**Audio accessories:** These accessories allow communication while the DUT is worn on the body.

**Body worn accessories:** These accessories allow the DUT to be worn on the body of the user.

**Maximum Power:** Defined as the upper limit of the production line final test station

#### 4.0 Referenced Standards and Guidelines

This product is designed to comply with the following applicable national and international standards and guidelines.

- Federal Communications Commission, "Evaluating Compliance with FCC Guidelines for Human Exposure to Radio frequency Electromagnetic Fields", OET Bulletin 65, FCC, Washington, D.C.: 1997.
- Institute of Electrical and Electronics Engineers (IEEE) C95.1-2019
- Ministry of Health (Canada) Safety Code 6 (2015), Limits of Human Exposure to Radio frequency Electromagnetic Fields in the Frequency Range from 3 kHz to 300 GHz
- RSS-102 (Issue 6) – Radio Frequency (RF) Exposure Compliance of Radio communication Apparatus (All Frequency Bands)
- ANATEL, Brazil Regulatory Authority, Resolution No 700 of September 28, 2018 "Approves the Regulation on the Assessment of Human Exposure to Electric, Magnetic and Electromagnetic Fields Associated with the Operation of Radio communication Transmitting Stations.
- IEC/IEEE 62209-1528-2020 Measurement procedure for the assessment of specific absorption rate of human exposure to radio frequency fields from hand-held and body-mounted wireless communication devices - Part 1528: Human models, instrumentation, and procedures (Frequency range of 4 MHz to 10 GHz)
- FCC KDB – 643646 D01 SAR Test for PTT Radios v01r03
- FCC KDB – 865664 D01 SAR Measurement 100 MHz to 6 GHz v01r04
- FCC KDB – 865664 D02 RF Exposure Reporting v01r02
- FCC KDB – 447498 D01 General RF Exposure Guidance v06

Table 2

| EXPOSURE LIMITS                                                            | SAR (W/kg)                                               |                                                  |
|----------------------------------------------------------------------------|----------------------------------------------------------|--------------------------------------------------|
|                                                                            | (General Population / Uncontrolled Exposure Environment) | (Occupational / Controlled Exposure Environment) |
| Spatial Average - ANSI - (averaged over the whole body)                    | 0.08                                                     | 0.4                                              |
| Spatial Peak - ANSI - (averaged over any 1-g of tissue)                    | 1.6                                                      | 8.0                                              |
| Spatial Peak – ICNIRP/ANSI - (hands/wrists/feet/ankles averaged over 10-g) | 4.0                                                      | 20.0                                             |
| Spatial Peak - ICNIRP - (Head and Trunk 10-g)                              | 2.0                                                      | 10.0                                             |

## 5.0 Description of Device Under Test (DUT)

This radio contains transmit and receive circuitry for digital two way radio communications. The modulation scheme used for digital two-way radio communications is 4 Level Frequency Shift Keying (4FSK). 4FSK is a modulation technique that transmits information by altering the frequency of the carrier frequency (RF) signal. Data is converted into complex symbols, which alter the RF signal and transmit the information. When the signal is received, the change in frequency is converted back into symbols and then into the original data. The system can accommodate 2-voice channels in a standard 12.5 kHz channel as used in two-way radio.

The LMR bands in this device operate in a half duplex system. A half duplex system only allows the user to transmit or receive. This device cannot transmit and receive simultaneously. The user must stop transmitting in order to receive a signal or listen for a response, regardless of PTT button or use of voice activated audio accessories. This type of operation, along with the RF safety booklet, which instructs the user to transmit no more than 50% of the time, justifies the use of 50% duty factor for this device.

Table 3 below summarizes the technologies, bands, maximum duty cycles and maximum output powers. Maximum output powers are defined as upper limit of the production line final test station.

Table 3

| Technology | Transmit Band (MHz) | Transmission | Duty Cycle (%) | Conducted (Average Detector) Maximum Power (W) |
|------------|---------------------|--------------|----------------|------------------------------------------------|
| LMR        | 400-470             | FM           | 50*            | 4.80                                           |
| LMR        | 400-470             | 4FSK         | 25*            | 4.80                                           |

Note - \* includes 50% PTT operation

The intended operating positions are “at the face” with the DUT at least 25 cm from the mouth, and “at the body” by means of the offered body worn accessories. Body worn audio and PTT operation is accomplished by means of optional remote accessories that are connected to the radio.

## 6.0 Optional Accessories and Test Criteria

This device is offered with optional accessories. All accessories were individually evaluated during the test plan creation to determine if testing was required per the guidelines outlined in "SAR Test Reduction Considerations for Occupational PTT Radios" FCC KDB 643646 to assess compliance of this device. The following sections identify the test criteria and details for each accessory category. Refer to Exhibit 7B for antenna separation distances.

### 6.1 Antennas

Table 4

| Antenna No. | Antenna Models | Description                                              | Selected for test | Tested |
|-------------|----------------|----------------------------------------------------------|-------------------|--------|
| 1           | AN000484A01    | UHF Whip Antenna, 400 – 470 MHz, 16cm, ¼ wave, 3.24 dBi  | Yes               | Yes    |
| 2           | AN000507A01    | UHF Stubby Antenna, 400 – 470 MHz, 10cm, ¼ wave, 2.0 dBi | Yes               | Yes    |

### 6.2 Battery

Table 5

| Battery No. | Battery Models | Description                       | Selected for test | Tested | Comments |
|-------------|----------------|-----------------------------------|-------------------|--------|----------|
| 1           | PMNN4908A      | BATTERY PACK,BATT LI-ION 2200 MAH | Yes               | Yes    |          |

### 6.3 Body worn Accessories

Table 6

| Body worn No. | Body worn Models | Description              | Selected for test | Tested | Comments |
|---------------|------------------|--------------------------|-------------------|--------|----------|
| 1             | PMLN8741A        | BELT CLIP MAG ONE 2 INCH | Yes               | Yes    |          |

## 6.4 Audio Accessories

Table 7

| Audio No. | Audio Acc. Models | Description                                        | Selecte<br>d for<br>test | Teste<br>d | Comments                   |
|-----------|-------------------|----------------------------------------------------|--------------------------|------------|----------------------------|
| 1         | PMMN4092A         | REMOTE SPEAKER MIC, MAG ONE                        | Yes                      | Yes        | Default Audio              |
| 2         | PMLN6534A         | EARBUD W IN-LINE<br>MIC/PTT/VOX,MAGONE             | Yes                      | Yes        |                            |
| 3         | PMLN6542A         | ACCESSORY KIT,BREEZE HS W<br>BOOM MIC & PTT MAGONE | Yes                      | Yes        |                            |
| 4         | PMLN6532A         | SWIVEL EARPC W MIC/PTT<br>MAGONE                   | Yes                      | Yes        |                            |
| 5         | PMLN6536A         | 2-WIRE W/ TRANS TUBE, BLACK                        | Yes                      | Yes        |                            |
| 6         | PMLN6530A         | 2-WIRE W/ TRANS TUBE, BLACK                        | Yes                      | Yes        |                            |
| 7         | PMLN6445A         | 2-W SURV(BEIGE)W CLR<br>ACOUSTICEARPCS             | No                       | No         | By similarity to PMLN6530A |
| 8         | PMLN6531A         | EARPC W IN-LINE<br>MIC/PTT/VOX,MAG ONE             | No                       | No         | By similarity to PMLN6534A |

## 7.0 Description of Test System

DASY6™ Test System



## 7.1 Descriptions of Robotics/Probes/Readout Electronics

Table 8

| Dosimetric System type                             | System version | DAE type | Probe Type          |
|----------------------------------------------------|----------------|----------|---------------------|
| Schmid & Partner<br>Engineering AG<br>SPEAG DASY 6 | V16.4.0.5005   | DAE4     | EX3DV4<br>(E-Field) |

The DASY6™ system is operated per the instructions in the DASY6™ Users Manual. The complete manual is available directly from SPEAG™. All measurement equipment used to assess SAR compliance was calibrated according to ISO/IEC 17025 A2LA guidelines. Section 9.0 presents additional test equipment information. Appendices B and C present the applicable calibration certificates.

## 7.2 Description of Phantom(s)

Table 9

| Phantom Type | Phantom(s) Used | Material Parameters                                          | Phantom Dimensions LxWxD (mm) | Material Thickness (mm) | Support Structure Material | Loss Tangent (wood) |
|--------------|-----------------|--------------------------------------------------------------|-------------------------------|-------------------------|----------------------------|---------------------|
| Triple Flat  | NA              | 200MHz - 6GHz;<br>Er = 3-5,<br>Loss Tangent = $\leq 0.05$    | 280x175x175                   | 2mm<br>+/- 0.2mm        | Wood                       | < 0.05              |
| SAM          | NA              | 300MHz - 6GHz;<br>Er = < 5,<br>Loss Tangent = $\leq 0.05$    | Human Model                   |                         |                            |                     |
| Oval Flat    | ✓               | 300MHz - 6GHz;<br>Er = 4+/- 1,<br>Loss Tangent = $\leq 0.05$ | 600x400x190                   |                         |                            |                     |

### 7.3 Description of Simulated Tissue

The sugar based simulate tissue is produced by placing the correct measured amount of De-ionized water into a large container. Each of the dried ingredients are weighed and added to the water carefully to avoid clumping. If the solution has a high sugar concentration the water is pre-heated to aid in dissolving the ingredients. The solution is mixed thoroughly, covered, and allowed to sit overnight prior to use.

The simulated tissue mixture was mixed based on the Simulated Tissue Composition indicated in Table 10. During the daily testing of this product, the applicable mixture was used to measure the Di-electric parameters at each of the tested frequencies to verify that the Di-electric parameters were within the tolerance of the tissue specifications.

Simulated Tissue Composition (percent by mass)

Table 10

| Ingredients      | 450MHz |
|------------------|--------|
|                  | Head   |
| Sugar            | 56.0   |
| Diacetin         | 0      |
| De ionized-Water | 39.1   |
| Salt             | 3.8    |
| HEC              | 1.0    |
| Bact.            | 0.1    |

## 8.0 Additional Test Equipment

The Table below lists additional test equipment used during the SAR assessment.

Table 11

| Equipment Type            | Model Number | Serial Number | Calibration Date | Calibration Due Date |
|---------------------------|--------------|---------------|------------------|----------------------|
| SPEAG PROBE               | EX3DV4       | 7816          | 10/06/2023       | 10/06/2026           |
| SPEAG DAE                 | DAE4         | 729           | 07/10/2024       | 07/10/2027           |
| AMPLIFIER POWER           | 10W1000C     | 312859        | CNR              | CNR                  |
| AMPLIFIER                 | 5S1G4        | 312988        | CNR              | CNR                  |
| AMPLIFIER                 | 5S4G11       | 312664        | CNR              | CNR                  |
| BI-DIRECTIONAL COUPLER    | 3020A        | 40295         | 07/09/2025       | 07/09/2026           |
| BI-DIRECTIONAL COUPLER    | 3022         | 77115         | 08/27/2025       | 08/27/2026           |
| BI-DIRECTIONAL COUPLER    | 3024         | 61177         | 05/27/2025       | 05/27/2026           |
| POWER METER               | E4418B       | MY45107917    | 08/19/2025       | 08/19/2026           |
| POWER METER               | E4419B       | MY45102105    | 11/07/2025       | 11/07/2026           |
| POWER SENSOR              | E4412A       | MY61020016    | 10/24/2025       | 10/24/2026           |
| POWER SENSOR              | E9301B       | MY41495733    | 10/24/2025       | 10/24/2026           |
| VECTOR SIGNAL GENERATOR   | E4438C       | MY42082269    | 11/06/2025       | 11/06/2026           |
| DATA LOGGER               | DSB          | 16398050      | 10/13/2025       | 10/13/2026           |
| DATA LOGGER               | DSB          | 16398050      | 10/13/2025       | 10/13/2026           |
| THERMOMETER               | HH806AU      | 080307        | 08/29/2025       | 08/29/2026           |
| TEMPERATURE PROBE         | 80PK-22      | 05032017      | 01/24/2026       | 01/24/2027           |
| NETWORK ANALYZER          | E5071B       | MY42403147    | 07/03/2025       | 07/03/2026           |
| DIELECTRIC ASSESSMENT KIT | DAK-3.5      | 1120          | 07/28/2025       | 07/28/2026           |
| SPEAG DIPOLE              | D450V3       | 1054          | 07/16/2024       | 07/16/2027           |
| SPEAG DIPOLE              | D450V3       | 1077          | 01/30/2025       | 01/30/2028           |

## 9.0 SAR Measurement System Validation and Verification

DASY output files of the probe/dipole calibration certificates and system verification test results are included in appendices B, C & D respectively.

### 9.1 System Validation

The SAR measurement system was validated according to procedures in KDB 865664. The validation status summary Table is below.

Table 12

| Dates      | Probe Calibration Point |     | Probe SN | Measured Tissue Parameters |              | Validation  |           |          |
|------------|-------------------------|-----|----------|----------------------------|--------------|-------------|-----------|----------|
|            |                         |     |          | $\sigma$                   | $\epsilon_r$ | Sensitivity | Linearity | Isotropy |
| CW         |                         |     |          |                            |              |             |           |          |
| 09/30/2024 | Body                    | 450 | 7816     | 0.84                       | 46.9         | Pass        | Pass      | Pass     |
| 09/23/2024 | Head                    | 450 |          | 0.96                       | 55.4         | Pass        | Pass      | Pass     |

### 9.2 System Verification

System verification checks were conducted each day during the SAR assessment. The results are normalized to 1W. Appendix D includes DASY plots with the largest deviation from the qualified source SAR target for each dipole. The Table below summarizes the daily system check results used for the SAR assessment.

Table 13

| Probe Serial # | Tissue Type   | Dipole Kit / Serial # | Ref SAR @ 1W (W/kg) | System Check Results Measured (W/kg) | System Check Test Results when normalized to 1W (W/kg) | Tested Date | Deviation (%) |
|----------------|---------------|-----------------------|---------------------|--------------------------------------|--------------------------------------------------------|-------------|---------------|
| 7816           | IEEE/IEC Head | 450-1054e             | 4.64 +/- 10%        | 1.19                                 | 4.76                                                   | 260426@     | 2.59          |
|                |               |                       |                     | 1.19                                 | 4.76                                                   | 260427@     | 2.59          |
|                |               |                       |                     | 1.16                                 | 4.64                                                   | 260514@     | 0.00          |
|                |               | 450-1077e             | 4.53 +/- 10%        | 1.22                                 | 4.88                                                   | 260515@     | 7.73          |

Note: '@' indicates that system verification check covers next test day (within 24 hours)

### 9.3 Equivalent Tissue Test Results

Simulated tissue prepared for SAR measurements is measured daily and within 24 hours prior to actual SAR testing to verify that the tissue is within +/- 5% of target parameters at the center of the transmit band. This measurement is done using the applicable equipment indicated in section 9.0. The Table below summarizes the measured tissue parameters used for the SAR assessment.

Table 14

| Frequency (MHz) | Tissue Type           | Conductivity Target (S/m) | Dielectric Constant Target | Conductivity Meas. (S/m) | Dielectric Constant Meas. | Tested Date |
|-----------------|-----------------------|---------------------------|----------------------------|--------------------------|---------------------------|-------------|
| 400.0125        | IEEE/ IEC Head        | 0.87<br>(0.83 - 0.91)     | 44.1<br>(41.9 - 46.3)      | 0.85                     | 43.5                      | 260427@     |
| 406.2000        |                       | 0.87<br>(0.83 – 0.91)     | 44.0<br>(41.8 – 46.2)      | 0.85                     | 43.3                      | 260426@     |
|                 |                       |                           |                            | 0.86                     | 43.4                      | 260427@     |
| 422.2000        |                       | 0.87<br>(0.83 – 0.91)     | 43.8<br>(41.6 – 46.0)      | 0.86                     | 42.9                      | 260426@     |
|                 |                       |                           |                            | 0.87                     | 43.0                      | 260427@     |
|                 |                       |                           |                            | 0.85                     | 42.3                      | 260515@     |
| 430.0000        |                       | 0.87<br>(0.83 – 0.91)     | 43.7<br>(41.6 – 45.9)      | 0.88                     | 42.9                      | 260427@     |
| 438.1000        |                       | 0.87<br>(0.83 – 0.91)     | 43.6<br>(41.5 – 45.8)      | 0.88                     | 42.6                      | 260426@     |
|                 |                       |                           |                            | 0.88                     | 42.7                      | 260427      |
| 450.0000        |                       | 0.87<br>(0.83 – 0.91)     | 43.5<br>(41.3 – 45.7)      | 0.89                     | 42.3                      | 260426@     |
|                 |                       |                           |                            | 0.89                     | 42.5                      | 260427@     |
|                 |                       |                           |                            | 0.89                     | 42.4                      | 260514@     |
|                 |                       |                           |                            | 0.88                     | 41.7                      | 260515@     |
| 454.1000        |                       | 0.87<br>(0.83 – 0.91)     | 43.5<br>(41.3 – 45.7)      | 0.89                     | 42.2                      | 260426@     |
|                 | 0.90                  |                           |                            | 42.4                     | 260427@                   |             |
| 460.0000        | 0.87<br>(0.83 – 0.91) | 43.4<br>(41.3 – 45.6)     | 0.90                       | 42.3                     | 260427@                   |             |
| 469.9875        | 0.87<br>(0.83 – 0.91) | 43.4<br>(41.2 – 45.6)     | 0.91                       | 42.1                     | 260427@                   |             |
|                 |                       |                           | 0.91                       | 41.9                     | 260514@                   |             |

Note: '@' indicates that tissue test result covers next test day (within 24 hours)

## 10.0 Environmental Test Conditions

The EME Laboratory's ambient environment is well controlled resulting in very stable simulated tissue temperature and therefore stable dielectric properties. Simulated tissue temperature is measured prior to each scan to insure it is within  $\pm 2^{\circ}\text{C}$  of the temperature at which the dielectric properties were determined. The liquid depth within the phantom used for measurements was at least 15cm. Additional precautions are routinely taken to ensure the stability of the simulated tissue such as covering the phantoms when scans are not actively in process in order to minimize evaporation. The lab environment is continuously monitored. The Table below presents the range and average environmental conditions during the SAR tests reported herein:

Table 15

|                     | Target     | Measured                             |
|---------------------|------------|--------------------------------------|
| Ambient Temperature | 18 – 25 °C | Range: 21.1 – 22.8°C<br>Avg. 22.0 °C |
| Tissue Temperature  | 18 – 25 °C | Range: 21.1 -23.2°C<br>Avg. 22.2°C   |

Relative humidity target range is a recommended target

The EME Lab RF environment uses a Spectrum Analyzer to monitor for extraneous large signal RF contaminants that could possibly affect the test results. If such unwanted signals are discovered the SAR scans are repeated.

## 11.0 DUT Test Setup and Methodology

### 11.1 Measurements

SAR measurements were performed using the DASY system described in section 8.0 using zoom scans. Oval flat phantoms filled with applicable simulated tissue were used for body and face testing.

The Table below includes the step sizes and resolution of area and zoom scans per KDB 865664 requirements.

Table 16

| Description                                                                                                                                                                                                                                                                                                                                                                                                                                          |                                           | ≤ 3 GHz                                                                                                                                                                                                                                                           | > 3 GHz                                                                                                                       |
|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------------------------------------------------|
| Maximum distance from closest measurement point (geometric center of probe sensors) to phantom surface                                                                                                                                                                                                                                                                                                                                               |                                           | 5 ± 1 mm                                                                                                                                                                                                                                                          | $\frac{1}{2} \cdot \delta \cdot \ln(2) \pm 0.5 \text{ mm}$                                                                    |
| Maximum probe angle from probe axis to phantom surface normal at the measurement location                                                                                                                                                                                                                                                                                                                                                            |                                           | 30° ± 1°                                                                                                                                                                                                                                                          | 20° ± 1°                                                                                                                      |
| Maximum area scan spatial resolution: $\Delta x_{\text{Area}}$ , $\Delta y_{\text{Area}}$                                                                                                                                                                                                                                                                                                                                                            |                                           | $\leq 2 \text{ GHz: } \leq 15 \text{ mm}$<br>$2 - 3 \text{ GHz: } \leq 12 \text{ mm}$                                                                                                                                                                             | $3 - 4 \text{ GHz: } \leq 12 \text{ mm}$<br>$4 - 6 \text{ GHz: } \leq 10 \text{ mm}$                                          |
|                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                           | When the x or y dimension of the test device, in the measurement plane orientation, is smaller than the above, the measurement resolution must be ≤ the corresponding x or y dimension of the test device with at least one measurement point on the test device. |                                                                                                                               |
| Maximum zoom scan spatial resolution: $\Delta x_{\text{Zoom}}$ , $\Delta y_{\text{Zoom}}$                                                                                                                                                                                                                                                                                                                                                            |                                           | $\leq 2 \text{ GHz: } \leq 8 \text{ mm}$<br>$2 - 3 \text{ GHz: } \leq 5 \text{ mm}^*$                                                                                                                                                                             | $3 - 4 \text{ GHz: } \leq 5 \text{ mm}^*$<br>$4 - 6 \text{ GHz: } \leq 4 \text{ mm}^*$                                        |
| Maximum zoom scan spatial resolution, normal to phantom surface                                                                                                                                                                                                                                                                                                                                                                                      | uniform grid: $\Delta z_{\text{Zoom}}(n)$ | ≤ 5 mm                                                                                                                                                                                                                                                            | $3 - 4 \text{ GHz: } \leq 4 \text{ mm}$<br>$4 - 5 \text{ GHz: } \leq 3 \text{ mm}$<br>$5 - 6 \text{ GHz: } \leq 2 \text{ mm}$ |
| <p>Note: <math>\delta</math> is the penetration depth of a plane-wave at normal incidence to the tissue medium; see draft standard IEEE P1528-2011 for details.</p> <p>* When zoom scan is required and the reported SAR from the area scan based 1-g SAR estimation procedures of KDB 447498 is ≤ 1.4 W/kg, ≤ 8 mm, ≤ 7 mm and ≤ 5 mm zoom scan resolution may be applied, respectively, for 2 GHz to 3 GHz, 3 GHz to 4 GHz and 4 GHz to 6 GHz.</p> |                                           |                                                                                                                                                                                                                                                                   |                                                                                                                               |

## 11.2 DUT Configuration(s)

The DUT is a portable device operational at the body and face as described in section 6.0 while using the applicable accessories listed in section 7.0. All accessories listed in section 7.0 of this report were considered when implementing the guidelines specified in KDB 643646. KDB 941225 was applied to LTE test configurations.

## 11.3 DUT Positioning Procedures

The positioning of the device for each body location is described below and illustrated in Appendix G.

### 11.3.1 Body

The DUT was positioned in normal use configuration against the phantom with the offered body worn accessory as well as with and without the offered audio accessories as applicable.

### 11.3.2 Head

Not applicable.

### 11.3.3 Face

The DUT was positioned with its' front and back sides separated 2.5cm from the phantom.

## 11.4 DUT Test Channels

The number of test channels was determined by using the following IEEE 1528 equation. The use of this equation produces the same or more test channels compared to the FCC KDB 447498 number of test channels formula.

$$N_c = 2 * \text{roundup}[10 * (f_{\text{high}} - f_{\text{low}}) / f_c] + 1$$

Where

$N_c$  = Number of channels

$F_{\text{high}}$  = Upper channel

$F_{\text{low}}$  = Lower channel

$F_c$  = Center channel

## 11.5 SAR Result Scaling Methodology

The calculated 1-gram averaged SAR results indicated as "Max Calc. 1g-SAR" in the data Tables is determined by scaling the measured SAR to account for power leveling variations and drift. Appendix F includes a shortened scan to justify SAR scaling for drift. For this device the "Max Calc. 1g-SAR" are scaled using the following formula:

$$\text{Max\_Calc} = \text{SAR\_meas} \cdot 10^{\frac{-\text{Drift}}{10}} \cdot \frac{P_{\text{max}}}{P_{\text{int}}} \cdot \text{DC}$$

$P_{\text{max}}$  = Maximum Power (W)

$P_{\text{int}}$  = Initial Power (W)

Drift = DASY drift results (dB)

SAR\_meas = Measured 1-g Avg. SAR (W/kg)

DC = Transmission mode duty cycle in % where applicable

50% duty cycle is applied for PTT operation

Note: for conservative results, the following are applied:

If  $P_{\text{int}} > P_{\text{max}}$ , then  $P_{\text{max}}/P_{\text{int}} = 1$ .

Drift = 1 for positive drift

Additional SAR scaling was applied using the methodologies outlined in FCC KDB 865664 using tissue sensitivity values. SAR was scaled for conditions where the tissue permittivity was measured above the nominal target and for tissue conductivity that was measured below the nominal target. Negative or reduced SAR scaling is not permitted.

## 11.6 DUT Test Plan

The guidelines and requirements outlined in section 4.0 were used to assess compliance of this device. All modes of operation identified in section 6.0 were considered during the development of the test plan. All tests were performed in CW and 50% duty cycle was applied to PTT configurations in the final results.

## 12.0 DUT Test Data for LMR

### 12.1 SAR assessment for LMR UHF

#### 12.1.1 Assessment at FCC for 406.125 – 512 MHz

Table 17

| SAR Plot | Test Position | Antenna     | Battery   | Carry Accessory | Cable Accessory | Test Freq (MHz) | Init Pwr (W) | SAR Drift (dB) | Meas. 1g-SAR (W/kg) | Max Calc. 1g-SAR (W/kg) |
|----------|---------------|-------------|-----------|-----------------|-----------------|-----------------|--------------|----------------|---------------------|-------------------------|
| 1        | Body          | AN000484A01 | PMNN4908A | PMLN8741A       | PMMN4092A       | 406.2000        | 4.80         | -0.55          | 7.08                | 4.02                    |
|          |               |             |           |                 |                 | 422.2000        | 4.77         | -0.56          | 7.98                | 4.57                    |
|          |               |             |           |                 |                 | 438.1000        |              |                |                     |                         |
|          |               |             |           |                 |                 | 454.1000        | 4.79         | -0.31          | 6.15                | 3.31                    |
|          |               |             |           |                 |                 | 469.9875        |              |                |                     |                         |
|          | Body          | AN000507A01 | PMNN4908A | PMLN8741A       | PMMN4092A       | 450.0125        |              |                |                     |                         |
|          |               |             |           |                 |                 | 460.0000        |              |                |                     |                         |
|          |               |             |           |                 |                 | 469.9875        | 4.69         | -0.38          | 4.20                | 2.35                    |
|          | Body          | AN000484A01 | PMNN4908A | PMLN8741A       | PMLN6534A       | 422.2000        | 4.72         | -0.37          | 7.94                | 4.40                    |
|          |               |             |           |                 | PMLN6542A       | 422.2000        | 4.67         | -0.28          | 7.90                | 4.33                    |
|          |               |             |           |                 | PMLN6532A       | 422.2000        | 4.70         | -0.22          | 7.14                | 3.84                    |
|          |               |             |           |                 | PMLN6536A       | 422.2000        | 4.73         | -0.39          | 7.76                | 4.31                    |
|          |               |             |           |                 | PMLN6530A       | 422.2000        | 4.70         | -0.23          | 7.33                | 3.95                    |
| 2        | Face          | AN000484A01 | PMNN4908A | @ front         | N/A             | 406.2000        | 4.80         | -0.35          | 4.54                | 2.46                    |
|          |               |             |           |                 |                 | 422.2000        |              |                |                     |                         |
|          |               |             |           |                 |                 | 438.1000        |              |                |                     |                         |
|          |               |             |           |                 |                 | 454.1000        |              |                |                     |                         |
|          |               |             |           |                 |                 | 469.9875        |              |                |                     |                         |
|          | Face          | AN000507A01 | PMNN4908A | @ front         | N/A             | 450.0125        |              |                |                     |                         |
|          |               |             |           |                 |                 | 460.0000        |              |                |                     |                         |
|          |               |             |           |                 |                 | 469.9875        | 4.70         | -0.27          | 2.77                | 1.51                    |

## 12.1.2 Assessment at ISED for 406.125 – 430 MHz

Based on the assessment results for body and face per KDB643646 D01, additional tests were not required for the ISED, Industry Canada frequency range (406.125 – 430 MHz).

As per ISED Notice 2016-DRS001, additional tests were required for the low, mid and high frequency channels for the configuration with the highest SAR value. The SAR results are in Tables below. SAR plots are included in Appendix for the highest configuration.

Table 18

| SAR Plot | Test Position | Antenna     | Battery   | Carry Accessory | Cable Accessory | Test Freq (MHz) | Init Pwr (W) | SAR Drift (dB) | Meas. 1g-SAR (W/kg) | Max Calc. 1g-SAR (W/kg) |
|----------|---------------|-------------|-----------|-----------------|-----------------|-----------------|--------------|----------------|---------------------|-------------------------|
| 3        | Body          | AN000484A01 | PMNN4908A | PMLN8741A       | PMMN4092A       | 406.2000        | 4.80         | -0.55          | 7.08                | 4.02                    |
|          |               |             |           |                 |                 | 422.2000        | 4.74         | -0.14          | 8.83                | 4.62                    |
|          |               |             |           |                 |                 | 430.0000        | 4.80         | -0.29          | 8.45                | 4.52                    |
| 4        | Face          | AN000484A01 | PMNN4908A | @ front         | N/A             | 406.2000        | 4.80         | -0.35          | 4.54                | 2.46                    |
|          |               |             |           |                 |                 | 422.2000        | 4.77         | -0.35          | 4.88                | 2.66                    |
|          |               |             |           |                 |                 | 430.0000        | 4.73         | -0.36          | 5.91                | 3.26                    |

## 12.1.3 Assessment at ISED for 450 – 470 MHz

Based on the assessment results for body and face per KDB643646 D01, additional tests were not required for the ISED, Industry Canada frequency range (450 – 470 MHz).

As per ISED Notice 2016-DRS001, additional tests were required for the low, mid and high frequency channels for the configuration with the highest SAR value. The SAR results are in Tables below. SAR plots are included in Appendix for the highest configuration.

Table 19

| SAR Plot | Test Position | Antenna     | Battery   | Carry Accessory | Cable Accessory | Test Freq (MHz) | Init Pwr (W) | SAR Drift (dB) | Meas. 1g-SAR (W/kg) | Max Calc. 1g-SAR (W/kg) |
|----------|---------------|-------------|-----------|-----------------|-----------------|-----------------|--------------|----------------|---------------------|-------------------------|
| 5        | Body          | AN000484A01 | PMNN4908A | PMLN8741A       | PMMN4092A       | 454.1000        | 4.79         | -0.31          | 6.15                | 3.30                    |
|          |               |             |           |                 |                 | 460.0000        | 4.76         | -0.24          | 5.19                | 2.77                    |
|          |               |             |           |                 |                 | 469.9875        | 4.78         | -0.36          | 4.93                | 2.69                    |
| 6        | Face          | AN000484A01 | PMNN4908A | @ front         | N/A             | 454.1000        | 4.79         | -0.26          | 5.34                | 2.84                    |
|          |               |             |           |                 |                 | 460.0000        | 4.78         | -0.23          | 4.21                | 2.23                    |
|          |               |             |           |                 |                 | 469.9875        | 4.78         | -0.28          | 3.84                | 2.06                    |

## 12.1.4 Assessment for outside FCC Frequency range

Table 20

| SAR Plot | Test Position | Antenna     | Battery   | Carry Accessory | Cable Accessory | Test Freq (MHz) | Init Pwr (W) | SAR Drift (dB) | Meas. 1g-SAR (W/kg) | Max Calc. 1g-SAR (W/kg) |
|----------|---------------|-------------|-----------|-----------------|-----------------|-----------------|--------------|----------------|---------------------|-------------------------|
| 7        | Body          | AN000484A01 | PMNN4908A | PMLN8741A       | PMMN4092A       | 400.0125        | 4.80         | -0.44          | 6.58                | 3.64                    |
| 8        | Face          | AN000484A01 | PMNN4908A | @ front         | N/A             | 400.0125        | 4.77         | -0.31          | 4.45                | 2.40                    |

## 13.0 Shortened Scan Assessment

A “shortened” scan using the highest SAR configuration overall from above was performed to validate the SAR drift of the full DASY5™ coarse and zoom scans. Note that the shortened scan represents the zoom scan performance result; this is obtained by first running a coarse scan to find the peak area and then, using a newly charged battery, a zoom scan only was performed. The results of the shortened cube scan presented in Appendix D demonstrate that the scaling methodology used to determine the calculated SAR results presented herein are valid. The SAR result from the Table below is provided in Appendix F.

Table 21

| SAR Plot | Test Position | Antenna     | Battery   | Carry Accessory | Cable Accessory | Test Freq (MHz) | Init Pwr (W) | SAR Drift (dB) | Meas. 1g-SAR (W/kg) | Max Calc. 1g-SAR (W/kg) |
|----------|---------------|-------------|-----------|-----------------|-----------------|-----------------|--------------|----------------|---------------------|-------------------------|
| 9        | Body          | AN000484A01 | PMNN4908A | PMLN8741A       | PMMN4092A       | 422.2000        | 4.74         | -0.14          | 8.83                | 4.62                    |

## 14.0 Results Summary

Based on the test guidelines from section 4.0 and satisfying frequencies within FCC bands and ISED Canada Frequency bands, the highest Operational Maximum Calculated 1-gram average SAR values found for this filing:

Table 22

| Designator | Frequency band (MHz) | Max Calc at Body (W/kg) | Max Calc at Face (W/kg) |
|------------|----------------------|-------------------------|-------------------------|
|            |                      | 1g-SAR                  | 1g-SAR                  |
| FCC        |                      |                         |                         |
| LMR        | 406.125 - 512        | 4.62                    | 3.26                    |
| ISED       |                      |                         |                         |
| LMR        | 406.125 - 430        | 4.62                    | 3.26                    |
|            | 450 - 470            | 3.30                    | 2.84                    |
| Overall    |                      |                         |                         |
| LMR        | 400 - 470            | 4.62                    | 3.26                    |

All results are scaled to the maximum output power.

The test results clearly demonstrate compliance with FCC Occupational/Controlled RF Exposure limits of 8 W/kg averaged over 1 gram per the requirements of FCC 47 CFR § 2.1093 and RSS-102 (Issue 6).

## 15.0 Variability Assessment

Per the guidelines in KDB 865664 SAR variability assessment is required because SAR results are above 4.0W/kg (Occupational) or 0.8W/kg (General population) Choose applicable condition.

The Table below includes test results of the original measurement(s), the repeated measurement(s), and the ratio ( $SAR_{high}/SAR_{low}$ ) for the applicable test configuration(s).

Table 23

| Run#                   | Antenna     | Battery   | Carry Accessory | Cable Accessory | Test Freq. (MHz) | Adj. Calc. 1g-SAR (W/kg) | Ratio | Comments                                                                                    |
|------------------------|-------------|-----------|-----------------|-----------------|------------------|--------------------------|-------|---------------------------------------------------------------------------------------------|
| AR-AB-260427-02@       | AN000484A01 | PMNN4908A | PMLN8741A       | PMMN4092A       | 422.2000         | 4.54                     | 1.00  | No additional repeated scans is required due to the Ratio ( $SAR_{high}/SAR_{low}$ ) < 1.20 |
| BAD(MSR)-AB-260516-08@ |             |           |                 |                 |                  | 4.56                     |       |                                                                                             |

## 16.0 System Uncertainty

A system uncertainty analysis is not required for this report per KDB 865664 because the highest report SAR value for Occupational exposure is less than 7.5W/kg.

Per the guidelines of ISO/IEC 17025 a reported system uncertainty is required and therefore measurement uncertainty budget is included in Appendix A.

## Appendix A

### Measurement Uncertainty Budget

| <b>Uncertainty Budget for Device Under Test, for 300 MHz to 3000 MHz</b> |                                         |                       |                      |                                              |                                   |                                    |                                           |                                            |
|--------------------------------------------------------------------------|-----------------------------------------|-----------------------|----------------------|----------------------------------------------|-----------------------------------|------------------------------------|-------------------------------------------|--------------------------------------------|
| <b>Input quantity Xi (source of uncertainty)</b>                         | <b>IEEE 1528<br/>section<br/>(2020)</b> | <b>Tol.<br/>(± %)</b> | <b>Prob<br/>Dist</b> | <b>Div.<sup>a</sup><br/><math>q_i</math></b> | <b><math>c_i</math><br/>(1 g)</b> | <b><math>c_i</math><br/>(10 g)</b> | <b>1 g<br/><math>u_i</math><br/>(± %)</b> | <b>10 g<br/><math>u_i</math><br/>(± %)</b> |
| <b>Measurement System</b>                                                |                                         |                       |                      |                                              |                                   |                                    |                                           |                                            |
| Probe Calibration                                                        | 8.4.1.1                                 | 11.0                  | N<br>(k = 2)         | 2.00                                         | 1                                 | 1                                  | 5.5                                       | 5.5                                        |
| Probe Calibration Drift                                                  | 8.4.1.2                                 | 1.7                   | R                    | 1.73                                         | 1                                 | 1                                  | 1.0                                       | 1.0                                        |
| Probe linearity and detection limit                                      | 8.4.1.3                                 | 4.7                   | R                    | 1.73                                         | 1                                 | 1                                  | 2.7                                       | 2.7                                        |
| Broadband signal                                                         | 8.4.1.4                                 | 2.8                   | R                    | 1.73                                         | 1                                 | 1                                  | 1.6                                       | 1.6                                        |
| Probe isotropy                                                           | 8.4.1.5                                 | 7.6                   | R                    | 1.73                                         | 1                                 | 1                                  | 4.4                                       | 4.4                                        |
| Other probe and data acquisition errors                                  | 8.4.1.6                                 | 0.7                   | N                    | 1.00                                         | 1                                 | 1                                  | 0.7                                       | 0.7                                        |
| RF ambient and noise                                                     | 8.4.1.7                                 | 1.8                   | N                    | 1.00                                         | 1                                 | 1                                  | 1.8                                       | 1.8                                        |
| Probe positioning errors                                                 | 8.4.1.8                                 | 0.006 mm              | N                    | 1.00                                         | 0.14                              | 0.14                               | 0.1                                       | 0.1                                        |
| Data processing errors                                                   | 8.4.1.9                                 | 1.2                   | N                    | 1.00                                         | 1                                 | 1                                  | 1.2                                       | 1.2                                        |
| <b>Phantom and Device</b>                                                |                                         |                       |                      |                                              |                                   |                                    |                                           |                                            |
| Measurement of phantom conductivity( $\sigma$ )                          | 8.4.2.1                                 | 2.5                   | N                    | 1.00                                         | 0.78                              | 0.71                               | 2.0                                       | 1.8                                        |
| Temperature effects (medium)                                             | 8.4.2.2                                 | 3.3                   | R                    | 1.73                                         | 0.78                              | 0.71                               | 1.5                                       | 1.4                                        |
| Shell permittivity                                                       | 8.4.2.3                                 | 14                    | R                    | 1.73                                         | 0                                 | 0                                  | 0.0                                       | 0.0                                        |
| Distance between the radiating element of the DUT and the phantom medium | 8.4.2.4                                 | 2                     | N                    | 1.00                                         | 2                                 | 2                                  | 4.0                                       | 4.0                                        |
| Repeatability of positioning the DUT or source against the phantom       | 8.4.2.5                                 | 2.8                   | N                    | 1.00                                         | 1                                 | 1                                  | 2.8                                       | 2.8                                        |
| Device holder effects                                                    | 8.4.2.6                                 | 4.55                  | N                    | 1.00                                         | 1                                 | 1                                  | 4.6                                       | 4.6                                        |
| Effect of operating mode on probe sensitivity                            | 8.4.2.7                                 | 2.4                   | R                    | 1.73                                         | 1                                 | 1                                  | 1.4                                       | 1.4                                        |
| Time-average SAR                                                         | 8.4.2.8                                 | 1.7                   | R                    | 1.73                                         | 1                                 | 1                                  | 1.0                                       | 1.0                                        |
| Variation in SAR due to drift in output of DUT                           | 8.4.2.9                                 | 5                     | R                    | 1.73                                         | 1                                 | 1                                  | 2.9                                       | 2.9                                        |
| Validation antenna uncertainty (validation measurement only)             | 8.4.2.10                                | 0                     | N                    | 1.00                                         | 1                                 | 1                                  | 0.0                                       | 0.0                                        |
| Uncertainty in accepted power (validation measurement only)              | 8.4.2.11                                | 0                     | N                    | 1.00                                         | 1                                 | 1                                  | 0.0                                       | 0.0                                        |
| <b>Corrections to the SAR result (if applied)</b>                        |                                         |                       |                      |                                              |                                   |                                    |                                           |                                            |
| Phantom deviation from target ( $\epsilon', \sigma$ )                    | 8.4.3.1                                 | 1.9                   | N                    | 1.00                                         | 1                                 | 0.84                               | 1.9                                       | 1.6                                        |
| SAR scaling                                                              | 8.4.3.2                                 | 0                     | R                    | 1.73                                         | 1                                 | 1                                  | 0.0                                       | 0.0                                        |
| <b>Combined Standard Uncertainty</b>                                     |                                         |                       | RSS                  |                                              |                                   |                                    | 11.4                                      | 11.4                                       |
| <b>Expanded Uncertainty<br/>(95% CONFIDENCE LEVEL)</b>                   |                                         |                       | $k=2$                |                                              |                                   |                                    | 22.9                                      | 22.7                                       |

Notes for uncertainty budget Tables:

- Column headings a-k are given for reference.
- Tol. - tolerance in influence quantity.
- Prob. Dist. – Probability distribution
- N, R - normal, rectangular probability distributions
- Div. - divisor used to translate tolerance into normally distributed standard uncertainty
- $c_i$  - sensitivity coefficient that should be applied to convert the variability of the uncertainty component into a variability of SAR.
- $u_i$  – SAR uncertainty
- $v_i$  - degrees of freedom for standard uncertainty and effective degrees of freedom for the expanded uncertainty

| <b>Uncertainty Budget for System Validation (dipole &amp; flat phantom), for 300 MHz to 6000 MHz</b> |                                |               |              |                            |                |                 |                      |                       |
|------------------------------------------------------------------------------------------------------|--------------------------------|---------------|--------------|----------------------------|----------------|-----------------|----------------------|-----------------------|
| <i>a</i>                                                                                             | <i>b</i>                       | <i>c</i>      | <i>d</i>     | <i>e = f(d,k)</i>          | <i>f</i>       | <i>g</i>        | <i>h = c x f / e</i> | <i>i = c x g / e</i>  |
| Uncertainty Component                                                                                | IEEE 1528<br>section<br>(2020) | Tol.<br>(± %) | Prob<br>Dist | Div. <sup>a</sup><br>$q_i$ | $c_i$<br>(1 g) | $c_i$<br>(10 g) | 1 g<br>$u_i$<br>(±%) | 10 g<br>$u_i$<br>(±%) |
| <b>Measurement System</b>                                                                            |                                |               |              |                            |                |                 |                      |                       |
| Probe Calibration                                                                                    | 8.4.1.1                        | 19.9          | N            | 2.00                       | 1              | 1               | 10.0                 | 10.0                  |
| Probe Calibration Drift                                                                              | 8.4.1.2                        | 1.7           | R            | 1.73                       | 1              | 1               | 1.0                  | 1.0                   |
| Probe linearity and detection limit                                                                  | 8.4.1.3                        | 4.7           | R            | 1.73                       | 1              | 1               | 2.7                  | 2.7                   |
| Broadband signal                                                                                     | 8.4.1.4                        | 0.0           | R            | 1.73                       | 1              | 1               | 0.0                  | 0.0                   |
| Probe isotropy                                                                                       | 8.4.1.5                        | 4.7           | R            | 1.73                       | 1              | 1               | 2.7                  | 2.7                   |
| Other probe and data acquisition errors                                                              | 8.4.1.6                        | 1.2           | N            | 1.00                       | 1              | 1               | 1.2                  | 1.2                   |
| RF ambient and noise                                                                                 | 8.4.1.7                        | 0.6           | N            | 1.00                       | 1              | 1               | 0.6                  | 0.6                   |
| Probe positioning errors                                                                             | 8.4.1.8                        | 0.005 mm      | N            | 1.00                       | 0.29           | 0.29            | 0.2                  | 0.2                   |
| Data processing errors                                                                               | 8.4.1.9                        | 0.6           | N            | 1.00                       | 1              | 1               | 0.6                  | 0.6                   |
| <b>Phantom and Device</b>                                                                            |                                |               |              |                            |                |                 |                      |                       |
| Measurement of phantom conductivity ( $\sigma$ )                                                     | 8.4.2.1                        | 2.5           | N            | 1.00                       | 0.78           | 0.71            | 2.0                  | 1.8                   |
| Temperature effects (medium)                                                                         | 8.4.2.2                        | 3.4           | R            | 1.73                       | 0.78           | 0.71            | 1.5                  | 1.4                   |
| Shell permittivity                                                                                   | 8.4.2.3                        | 14            | R            | 1.73                       | 0.25           | 0.25            | 2.0                  | 2.0                   |
| Distance between the radiating element of the DUT and the phantom medium                             | 8.4.2.4                        | 1.3           | N            | 1.00                       | 2              | 2               | 2.6                  | 2.6                   |
| Effect of operating mode on probe sensitivity                                                        | 8.4.2.7                        | 0             | R            | 1.73                       | 1              | 1               | 0.0                  | 0.0                   |
| Time-average SAR                                                                                     | 8.4.2.8                        | 0             | R            | 1.73                       | 1              | 1               | 0.0                  | 0.0                   |
| Validation antenna uncertainty (validation measurement only)                                         | 8.4.2.10                       | 3.2           | N            | 1.00                       | 1              | 1               | 3.2                  | 3.2                   |
| Uncertainty in accepted power (validation measurement only)                                          | 8.4.2.11                       | 2             | N            | 1.00                       | 1              | 1               | 2.0                  | 2.0                   |
| <b>Corrections to the SAR result (if applied)</b>                                                    |                                |               |              |                            |                |                 |                      |                       |
| Phantom deviation from target ( $\epsilon', \sigma$ )                                                | 8.4.3.1                        | 1.9           | N            | 1.00                       | 1              | 0.84            | 1.9                  | 1.6                   |
| <b>Combined Standard Uncertainty</b>                                                                 |                                |               | RSS          |                            |                |                 | 12.3                 | 12.2                  |
| <b>Expanded Uncertainty</b><br>(95% CONFIDENCE LEVEL)                                                |                                |               | $k=2$        |                            |                |                 | 24.6                 | 24.5                  |

Notes for uncertainty budget Tables:

a) Column headings *a-k* are given for reference.

b) Tol. - tolerance in influence quantity.

c) Prob. Dist. – Probability distribution

d) N, R - normal, rectangular probability distributions

e) Div. - divisor used to translate tolerance into normally distributed standard uncertainty

f)  $c_i$  - sensitivity coefficient that should be applied to convert the variability of the uncertainty component into a variability of SAR.

g)  $u_i$  – SAR uncertainty

h)  $v_i$  - degrees of freedom for standard uncertainty and effective degrees of freedom for the expanded uncertainty

## Appendix B

### Probe Calibration Certificates

**Calibration Laboratory of****Schmid & Partner  
Engineering AG**

Zoughausstrasse 43, 8004 Zurich, Switzerland



**S** Schweizerischer Kalibrierdienst  
**C** Service suisse d'étalonnage  
**S** Servizio svizzero di taratura  
**S** Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **Motorola Solutions**  
 Bayan Lepas, Malaysia

Certificate No. **EX-7816\_Oct23**

**CALIBRATION CERTIFICATE**Object **EX3DV4 - SN:7816**

Calibration procedure(s) **QA CAL-01.v10, QA CAL-12.v10, QA CAL-14.v7, QA CAL-23.v6,  
 QA CAL-25.v8  
 Calibration procedure for dosimetric E-field probes**

Calibration date **October 06, 2023**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3) °C and humidity &lt; 70%.

Calibration Equipment used (M&amp;TE critical for calibration)

| Primary Standards          | ID               | Cal Date (Certificate No.)        | Scheduled Calibration |
|----------------------------|------------------|-----------------------------------|-----------------------|
| Power meter NRP2           | SN: 104778       | 30-Mar-23 (No. 217-03804/03805)   | Mar-24                |
| Power sensor NRP-Z91       | SN: 103244       | 30-Mar-23 (No. 217-03804)         | Mar-24                |
| OCP DAK-3.5 (weighted)     | SN: 1249         | 20-Oct-22 (OCP-DAK3.5-1249_Oct22) | Oct-23                |
| OCP DAK-12                 | SN: 1016         | 20-Oct-22 (OCP-DAK12-1016_Oct22)  | Oct-23                |
| Reference 20 dB Attenuator | SN: CC2552 (20x) | 30-Mar-23 (No. 217-03809)         | Mar-24                |
| DAE4                       | SN: 660          | 16-Mar-23 (No. DAE4-660_Mar23)    | Mar-24                |
| Reference Probe ES3DV2     | SN: 3013         | 06-Jan-23 (No. ES3-3013_Jan23)    | Jan-24                |

| Secondary Standards     | ID               | Check Date (in house)             | Scheduled Check        |
|-------------------------|------------------|-----------------------------------|------------------------|
| Power meter E4419B      | SN: GB41293874   | 06-Apr-16 (in house check Jun-22) | In house check: Jun-24 |
| Power sensor E4412A     | SN: MY41498087   | 06-Apr-16 (in house check Jun-22) | In house check: Jun-24 |
| Power sensor E4412A     | SN: 000110210    | 06-Apr-16 (in house check Jun-22) | In house check: Jun-24 |
| RF generator HP 8648C   | SN: US3642U01700 | 04-Aug-99 (in house check Jun-22) | In house check: Jun-24 |
| Network Analyzer E8358A | SN: US41080477   | 31-Mar-14 (in house check Oct-22) | In house check: Oct-24 |

|                                                                                                                 | Name           | Function              | Signature |
|-----------------------------------------------------------------------------------------------------------------|----------------|-----------------------|-----------|
| Calibrated by                                                                                                   | Jeton Kastrali | Laboratory Technician |           |
| Approved by                                                                                                     | Sven Kühn      | Technical Manager     |           |
| This calibration certificate shall not be reproduced except in full without written approval of the laboratory. |                |                       |           |

Issued: October 06, 2023

Certificate No: EX-7816\_Oct23

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**Calibration Laboratory of**Schmid & Partner  
Engineering AG

Zeughausstrasse 43, 8004 Zurich, Switzerland



**S** Schweizerischer Kalibrierdienst  
**C** Service suisse d'étalonnage  
**S** Servizio svizzero di taratura  
**S** Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108****Glossary**

|                        |                                                                                                                                                |
|------------------------|------------------------------------------------------------------------------------------------------------------------------------------------|
| TSL                    | tissue simulating liquid                                                                                                                       |
| NORM <sub>x,y,z</sub>  | sensitivity in free space                                                                                                                      |
| ConvF                  | sensitivity in TSL / NORM <sub>x,y,z</sub>                                                                                                     |
| DCP                    | diode compression point                                                                                                                        |
| CF                     | crest factor (1/duty_cycle) of the RF signal                                                                                                   |
| A, B, C, D             | modulation dependent linearization parameters                                                                                                  |
| Polarization $\varphi$ | $\varphi$ rotation around probe axis                                                                                                           |
| Polarization $\theta$  | $\theta$ rotation around an axis that is in the plane normal to probe axis (at measurement center), i.e., $\theta = 0$ is normal to probe axis |
| Connector Angle        | information used in DASY system to align probe sensor X to the robot coordinate system                                                         |

**Calibration is Performed According to the Following Standards:**

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices – Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

**Methods Applied and Interpretation of Parameters:**

- NORM<sub>x,y,z</sub>**: Assessed for E-field polarization  $\theta = 0$  ( $f \leq 900$  MHz in TEM-cell;  $f > 1800$  MHz: R22 waveguide). NORM<sub>x,y,z</sub> are only intermediate values, i.e., the uncertainties of NORM<sub>x,y,z</sub> does not affect the E<sup>2</sup>-field uncertainty inside TSL (see below ConvF).
- NORM(f)<sub>x,y,z</sub>** = NORM<sub>x,y,z</sub> \* frequency\_response (see Frequency Response Chart). This linearization is implemented in DASY4 software versions later than 4.2. The uncertainty of the frequency response is included in the stated uncertainty of ConvF.
- DCP<sub>x,y,z</sub>**: DCP are numerical linearization parameters assessed based on the data of power sweep with CW signal. DCP does not depend on frequency nor media.
- PAR**: PAR is the Peak to Average Ratio that is not calibrated but determined based on the signal characteristics
- A<sub>x,y,z</sub>; B<sub>x,y,z</sub>; C<sub>x,y,z</sub>; D<sub>x,y,z</sub>; VR<sub>x,y,z</sub>**: A, B, C, D are numerical linearization parameters assessed based on the data of power sweep for specific modulation signal. The parameters do not depend on frequency nor media. VR is the maximum calibration range expressed in RMS voltage across the diode.
- ConvF and Boundary Effect Parameters**: Assessed in flat phantom using E-field (or Temperature Transfer Standard for  $f \leq 800$  MHz) and inside waveguide using analytical field distributions based on power measurements for  $f > 800$  MHz. The same setups are used for assessment of the parameters applied for boundary compensation (alpha, depth) of which typical uncertainty values are given. These parameters are used in DASY4 software to improve probe accuracy close to the boundary. The sensitivity in TSL corresponds to NORM<sub>x,y,z</sub> \* ConvF whereby the uncertainty corresponds to that given for ConvF. A frequency dependent ConvF is used in DASY version 4.4 and higher which allows extending the validity from  $\pm 50$  MHz to  $\pm 100$  MHz.
- Spherical isotropy (3D deviation from isotropy)**: in a field of low gradients realized using a flat phantom exposed by a patch antenna.
- Sensor Offset**: The sensor offset corresponds to the offset of virtual measurement center from the probe tip (on probe axis). No tolerance required.
- Connector Angle**: The angle is assessed using the information gained by determining the NORM<sub>x</sub> (no uncertainty required).

EX3DV4 - SN:7816

October 06, 2023

**Parameters of Probe: EX3DV4 - SN:7816****Basic Calibration Parameters**

|                                                           | Sensor X | Sensor Y | Sensor Z | Unc (k = 2)  |
|-----------------------------------------------------------|----------|----------|----------|--------------|
| Norm ( $\mu\text{V}/(\text{V}/\text{m})^2$ ) <sup>A</sup> | 0.60     | 0.61     | 0.61     | $\pm 10.1\%$ |
| DCP (mV) <sup>B</sup>                                     | 103.2    | 105.0    | 105.5    | $\pm 4.7\%$  |

**Calibration Results for Modulation Response**

| UID   | Communication System Name   |   | A<br>dB | B<br>dB $\sqrt{\mu\text{V}}$ | C     | D<br>dB | VR<br>mV | Max<br>dev. | Max<br>Unc <sup>E</sup><br>k = 2 |
|-------|-----------------------------|---|---------|------------------------------|-------|---------|----------|-------------|----------------------------------|
| 0     | CW                          | X | 0.00    | 0.00                         | 1.00  | 0.00    | 137.7    | $\pm 3.3\%$ | $\pm 4.7\%$                      |
|       |                             | Y | 0.00    | 0.00                         | 1.00  |         | 141.8    |             |                                  |
|       |                             | Z | 0.00    | 0.00                         | 1.00  |         | 138.5    |             |                                  |
| 10352 | Pulse Waveform (200Hz, 10%) | X | 1.49    | 60.44                        | 6.04  | 10.00   | 60.0     | $\pm 2.8\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 1.48    | 60.25                        | 6.10  |         | 60.0     |             |                                  |
|       |                             | Z | 1.54    | 60.66                        | 6.11  |         | 60.0     |             |                                  |
| 10353 | Pulse Waveform (200Hz, 20%) | X | 52.00   | 76.00                        | 9.00  | 6.99    | 80.0     | $\pm 2.6\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 0.81    | 60.00                        | 4.80  |         | 80.0     |             |                                  |
|       |                             | Z | 50.00   | 76.00                        | 9.00  |         | 80.0     |             |                                  |
| 10354 | Pulse Waveform (200Hz, 40%) | X | 0.12    | 136.55                       | 0.00  | 3.98    | 95.0     | $\pm 2.4\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 0.17    | 144.35                       | 0.02  |         | 95.0     |             |                                  |
|       |                             | Z | 0.03    | 123.72                       | 0.48  |         | 95.0     |             |                                  |
| 10355 | Pulse Waveform (200Hz, 60%) | X | 7.20    | 159.70                       | 10.38 | 2.22    | 120.0    | $\pm 1.5\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 6.24    | 159.78                       | 14.94 |         | 120.0    |             |                                  |
|       |                             | Z | 0.28    | 159.16                       | 0.51  |         | 120.0    |             |                                  |
| 10367 | QPSK Waveform, 1 MHz        | X | 0.39    | 61.83                        | 11.06 | 1.00    | 150.0    | $\pm 3.7\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 0.45    | 63.15                        | 12.38 |         | 150.0    |             |                                  |
|       |                             | Z | 0.38    | 60.93                        | 10.53 |         | 150.0    |             |                                  |
| 10388 | QPSK Waveform, 10 MHz       | X | 1.10    | 64.73                        | 12.39 | 0.00    | 150.0    | $\pm 0.8\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 1.25    | 66.19                        | 13.74 |         | 150.0    |             |                                  |
|       |                             | Z | 1.22    | 65.50                        | 13.16 |         | 150.0    |             |                                  |
| 10396 | 64-QAM Waveform, 100 kHz    | X | 1.71    | 64.90                        | 16.09 | 3.01    | 150.0    | $\pm 1.0\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 1.65    | 64.48                        | 15.84 |         | 150.0    |             |                                  |
|       |                             | Z | 1.63    | 64.19                        | 15.85 |         | 150.0    |             |                                  |
| 10399 | 64-QAM Waveform, 40 MHz     | X | 2.65    | 66.13                        | 14.80 | 0.00    | 150.0    | $\pm 2.2\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 2.71    | 66.41                        | 15.09 |         | 150.0    |             |                                  |
|       |                             | Z | 2.74    | 66.30                        | 14.96 |         | 150.0    |             |                                  |
| 10414 | WLAN CCDF, 64-QAM, 40 MHz   | X | 3.69    | 66.74                        | 15.32 | 0.00    | 150.0    | $\pm 3.7\%$ | $\pm 9.6\%$                      |
|       |                             | Y | 3.74    | 66.65                        | 15.43 |         | 150.0    |             |                                  |
|       |                             | Z | 3.67    | 66.04                        | 15.13 |         | 150.0    |             |                                  |

Note: For details on UID parameters see Appendix

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k=2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%.

<sup>A</sup> The uncertainties of Norm X,Y,Z do not affect the  $E^2$ -field uncertainty inside TSL (see Pages 5 and 6).

<sup>B</sup> Linearization parameter uncertainty for maximum specified field strength.

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

EX3DV4 - SN:7816

October 06, 2023

**Parameters of Probe: EX3DV4 - SN:7816****Sensor Model Parameters**

|   | C1<br>fF | C2<br>fF | $\alpha$<br>$V^{-1}$ | T1<br>$ms V^{-2}$ | T2<br>$ms V^{-1}$ | T3<br>ms | T4<br>$V^{-2}$ | T5<br>$V^{-1}$ | T6   |
|---|----------|----------|----------------------|-------------------|-------------------|----------|----------------|----------------|------|
| x | 7.1      | 51.44    | 33.79                | 3.05              | 0.00              | 4.90     | 0.48           | 0.00           | 1.00 |
| y | 7.9      | 55.99    | 32.44                | 2.64              | 0.00              | 4.90     | 0.46           | 0.00           | 1.00 |
| z | 8.3      | 60.29    | 33.80                | 3.28              | 0.00              | 4.90     | 0.44           | 0.00           | 1.00 |

**Other Probe Parameters**

|                                               |            |
|-----------------------------------------------|------------|
| Sensor Arrangement                            | Triangular |
| Connector Angle                               | -133.1°    |
| Mechanical Surface Detection Mode             | enabled    |
| Optical Surface Detection Mode                | disabled   |
| Probe Overall Length                          | 337 mm     |
| Probe Body Diameter                           | 10 mm      |
| Tip Length                                    | 9 mm       |
| Tip Diameter                                  | 2.5 mm     |
| Probe Tip to Sensor X Calibration Point       | 1 mm       |
| Probe Tip to Sensor Y Calibration Point       | 1 mm       |
| Probe Tip to Sensor Z Calibration Point       | 1 mm       |
| Recommended Measurement Distance from Surface | 1.4 mm     |

**Note:** Measurement distance from surface can be increased to 3-4 mm for an Area Scan job.

EX3DV4 - SN:7816

October 06, 2023

**Parameters of Probe: EX3DV4 - SN:7816****Calibration Parameter Determined in Head Tissue Simulating Media**

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity <sup>F</sup> (S/m) | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k = 2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-------------|
| 30                   | 55.0                               | 0.75                            | 14.88   | 14.88   | 14.88   | 0.00               | 1.00                    | ±13.3%      |
| 64                   | 54.2                               | 0.75                            | 13.31   | 13.31   | 13.31   | 0.00               | 1.00                    | ±13.3%      |
| 128                  | 52.8                               | 0.76                            | 13.04   | 13.04   | 13.04   | 0.00               | 1.00                    | ±13.3%      |
| 150                  | 52.3                               | 0.76                            | 12.20   | 12.20   | 12.20   | 0.00               | 1.00                    | ±13.3%      |
| 300                  | 45.3                               | 0.87                            | 11.88   | 11.88   | 11.88   | 0.09               | 1.00                    | ±13.3%      |
| 450                  | 43.5                               | 0.87                            | 11.12   | 11.12   | 11.12   | 0.16               | 1.30                    | ±13.3%      |
| 750                  | 41.9                               | 0.89                            | 9.82    | 9.82    | 9.82    | 0.33               | 1.03                    | ±12.0%      |
| 835                  | 41.5                               | 0.90                            | 9.49    | 9.49    | 9.49    | 0.42               | 0.85                    | ±12.0%      |
| 900                  | 41.5                               | 0.97                            | 9.26    | 9.26    | 9.26    | 0.46               | 0.80                    | ±12.0%      |
| 1450                 | 40.5                               | 1.20                            | 8.08    | 8.08    | 8.08    | 0.36               | 0.80                    | ±12.0%      |
| 1810                 | 40.0                               | 1.40                            | 8.04    | 8.04    | 8.04    | 0.24               | 0.86                    | ±12.0%      |
| 1900                 | 40.0                               | 1.40                            | 8.01    | 8.01    | 8.01    | 0.24               | 0.86                    | ±12.0%      |
| 2100                 | 39.8                               | 1.49                            | 7.99    | 7.99    | 7.99    | 0.25               | 0.86                    | ±12.0%      |
| 2300                 | 39.5                               | 1.67                            | 7.98    | 7.98    | 7.98    | 0.19               | 0.90                    | ±12.0%      |
| 2450                 | 39.2                               | 1.80                            | 7.84    | 7.84    | 7.84    | 0.22               | 0.90                    | ±12.0%      |
| 2600                 | 39.0                               | 1.96                            | 7.68    | 7.68    | 7.68    | 0.11               | 0.90                    | ±12.0%      |
| 3500                 | 37.9                               | 2.91                            | 6.54    | 6.54    | 6.54    | 0.30               | 1.35                    | ±14.0%      |
| 3700                 | 37.7                               | 3.12                            | 6.69    | 6.69    | 6.69    | 0.30               | 1.35                    | ±14.0%      |
| 5250                 | 35.9                               | 4.71                            | 5.34    | 5.34    | 5.34    | 0.40               | 1.80                    | ±14.0%      |
| 5500                 | 35.6                               | 4.96                            | 4.80    | 4.80    | 4.80    | 0.40               | 1.80                    | ±14.0%      |
| 5600                 | 35.5                               | 5.07                            | 4.66    | 4.66    | 4.66    | 0.40               | 1.80                    | ±14.0%      |
| 5750                 | 35.4                               | 5.22                            | 4.87    | 4.87    | 4.87    | 0.40               | 1.80                    | ±14.0%      |

<sup>C</sup> Frequency validity above 300 MHz of ±100 MHz only applies for DASY v4.4 and higher (see Page 2), else it is restricted to ±50 MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ±10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4–9 MHz, and ConvF assessed at 11 MHz is 9–19 MHz. Above 5 GHz frequency validity can be extended to ±110 MHz.

<sup>F</sup> The probes are calibrated using tissue simulating liquids (TSL) that deviate for  $\epsilon$  and  $\sigma$  by less than ±5% from the target values (typically better than ±3%) and are valid for TSL with deviations of up to ±10%. If TSL with deviations from the target of less than ±5% are used, the calibration uncertainties are 11.1% for 0.7–3 GHz and 13.1% for 3–6 GHz.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAG warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz and below ±2% for frequencies between 3–6 GHz at any distance larger than half the probe tip diameter from the boundary.

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**Parameters of Probe: EX3DV4 - SN:7816****Calibration Parameter Determined in Body Tissue Simulating Media**

| f (MHz) <sup>C</sup> | Relative Permittivity <sup>F</sup> | Conductivity <sup>F</sup> (S/m) | ConvF X | ConvF Y | ConvF Z | Alpha <sup>G</sup> | Depth <sup>G</sup> (mm) | Unc (k = 2) |
|----------------------|------------------------------------|---------------------------------|---------|---------|---------|--------------------|-------------------------|-------------|
| 150                  | 61.9                               | 0.80                            | 11.99   | 11.99   | 11.99   | 0.00               | 1.00                    | ±13.3%      |
| 300                  | 58.2                               | 0.92                            | 11.48   | 11.48   | 11.48   | 0.02               | 1.35                    | ±13.3%      |
| 450                  | 56.7                               | 0.94                            | 11.24   | 11.24   | 11.24   | 0.11               | 1.20                    | ±13.3%      |
| 750                  | 55.5                               | 0.96                            | 9.89    | 9.89    | 9.89    | 0.40               | 0.80                    | ±12.0%      |
| 835                  | 55.2                               | 0.97                            | 9.51    | 9.51    | 9.51    | 0.40               | 0.85                    | ±12.0%      |
| 900                  | 55.0                               | 1.05                            | 9.35    | 9.35    | 9.35    | 0.40               | 0.85                    | ±12.0%      |
| 1450                 | 54.0                               | 1.30                            | 8.79    | 8.79    | 8.79    | 0.30               | 0.80                    | ±12.0%      |
| 1810                 | 53.3                               | 1.52                            | 8.34    | 8.34    | 8.34    | 0.27               | 0.86                    | ±12.0%      |
| 1900                 | 53.3                               | 1.52                            | 8.35    | 8.35    | 8.35    | 0.24               | 0.86                    | ±12.0%      |
| 2100                 | 53.2                               | 1.82                            | 8.01    | 8.01    | 8.01    | 0.22               | 0.86                    | ±12.0%      |
| 2300                 | 52.9                               | 1.81                            | 7.88    | 7.88    | 7.88    | 0.25               | 0.90                    | ±12.0%      |
| 2450                 | 52.7                               | 1.95                            | 7.74    | 7.74    | 7.74    | 0.13               | 0.90                    | ±12.0%      |
| 2600                 | 52.5                               | 2.16                            | 7.58    | 7.58    | 7.58    | 0.16               | 0.90                    | ±12.0%      |
| 3500                 | 51.3                               | 3.31                            | 6.34    | 6.34    | 6.34    | 0.40               | 1.35                    | ±14.0%      |
| 3700                 | 51.0                               | 3.55                            | 6.18    | 6.18    | 6.18    | 0.40               | 1.35                    | ±14.0%      |
| 5250                 | 48.9                               | 5.36                            | 4.84    | 4.84    | 4.84    | 0.50               | 1.90                    | ±14.0%      |
| 5500                 | 48.6                               | 5.65                            | 4.36    | 4.36    | 4.36    | 0.50               | 1.90                    | ±14.0%      |
| 5600                 | 48.5                               | 5.77                            | 4.32    | 4.32    | 4.32    | 0.50               | 1.90                    | ±14.0%      |
| 5750                 | 48.3                               | 5.94                            | 4.36    | 4.36    | 4.36    | 0.50               | 1.90                    | ±14.0%      |

<sup>C</sup> Frequency validity above 300MHz of ±100MHz only applies for DASy v4.4 and higher (see Page 2), else it is restricted to ±50MHz. The uncertainty is the RSS of the ConvF uncertainty at calibration frequency and the uncertainty for the indicated frequency band. Frequency validity below 300 MHz is ±10, 25, 40, 50 and 70 MHz for ConvF assessments at 30, 64, 128, 150 and 220 MHz respectively. Validity of ConvF assessed at 6 MHz is 4–9 MHz, and ConvF assessed at 13 MHz is 9–19 MHz. Above 5 GHz frequency validity can be extended to ±110 MHz.

<sup>F</sup> The probes are calibrated using tissue simulating liquids (TSL) that deviate for  $\epsilon'$  and  $\sigma$  by less than ±5% from the target values (typically better than ±3%) and are valid for TSL with deviations of up to ±10%. If TSL with deviations from the target of less than ±5% are used, the calibration uncertainties are 11.1% for 0.7 - 3 GHz and 13.1% for 3 - 6 GHz.

<sup>G</sup> Alpha/Depth are determined during calibration. SPEAQ warrants that the remaining deviation due to the boundary effect after compensation is always less than ±1% for frequencies below 3 GHz and below ±2% for frequencies between 3–6 GHz at any distance larger than half the probe tip diameter from the boundary.

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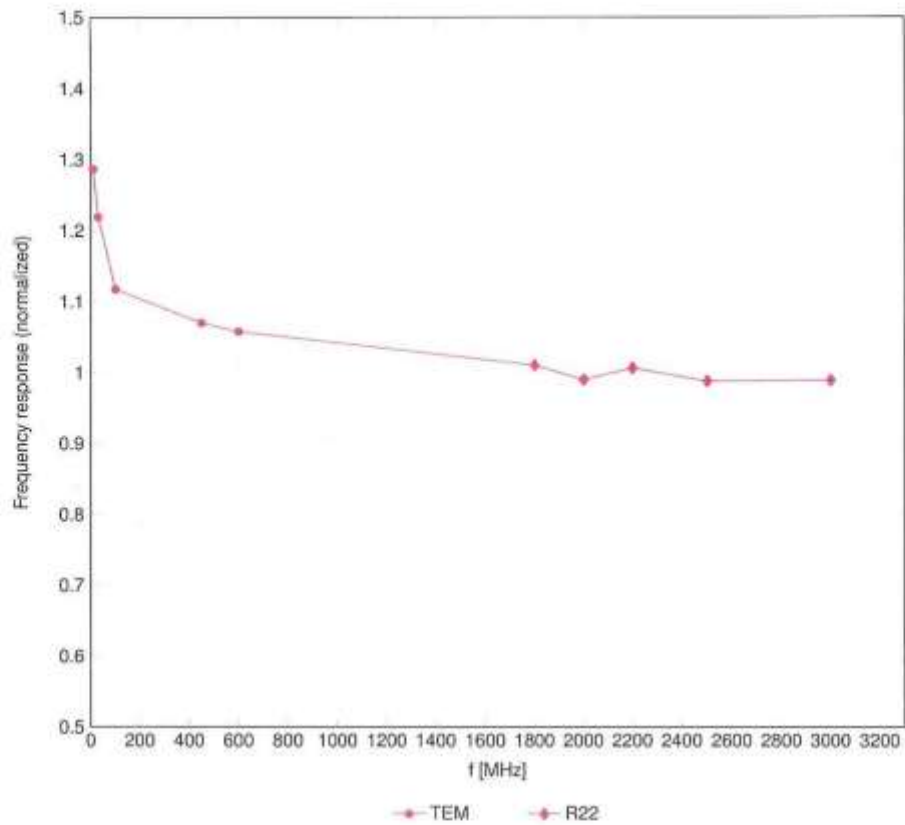
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**Frequency Response of E-Field**

(TEM-Cell:ifi110 EXX, Waveguide:R22)

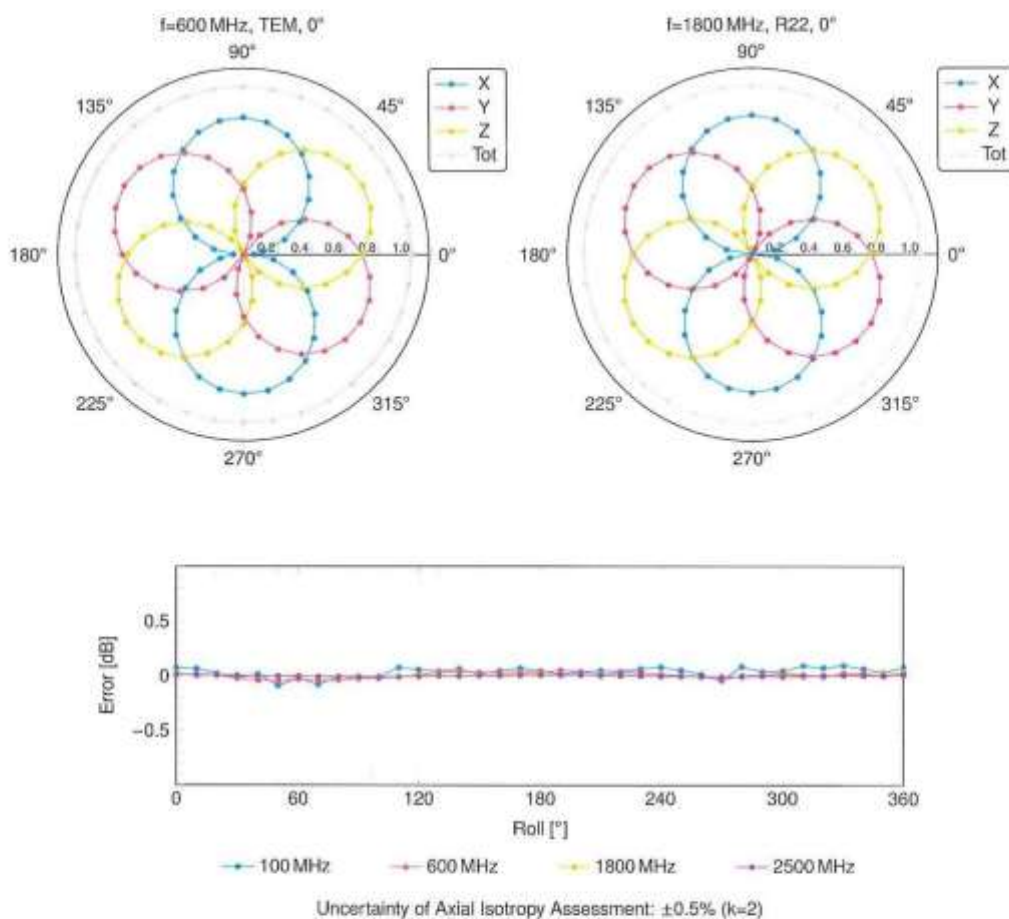
Uncertainty of Frequency Response of E-field:  $\pm 6.3\%$  (k=2)

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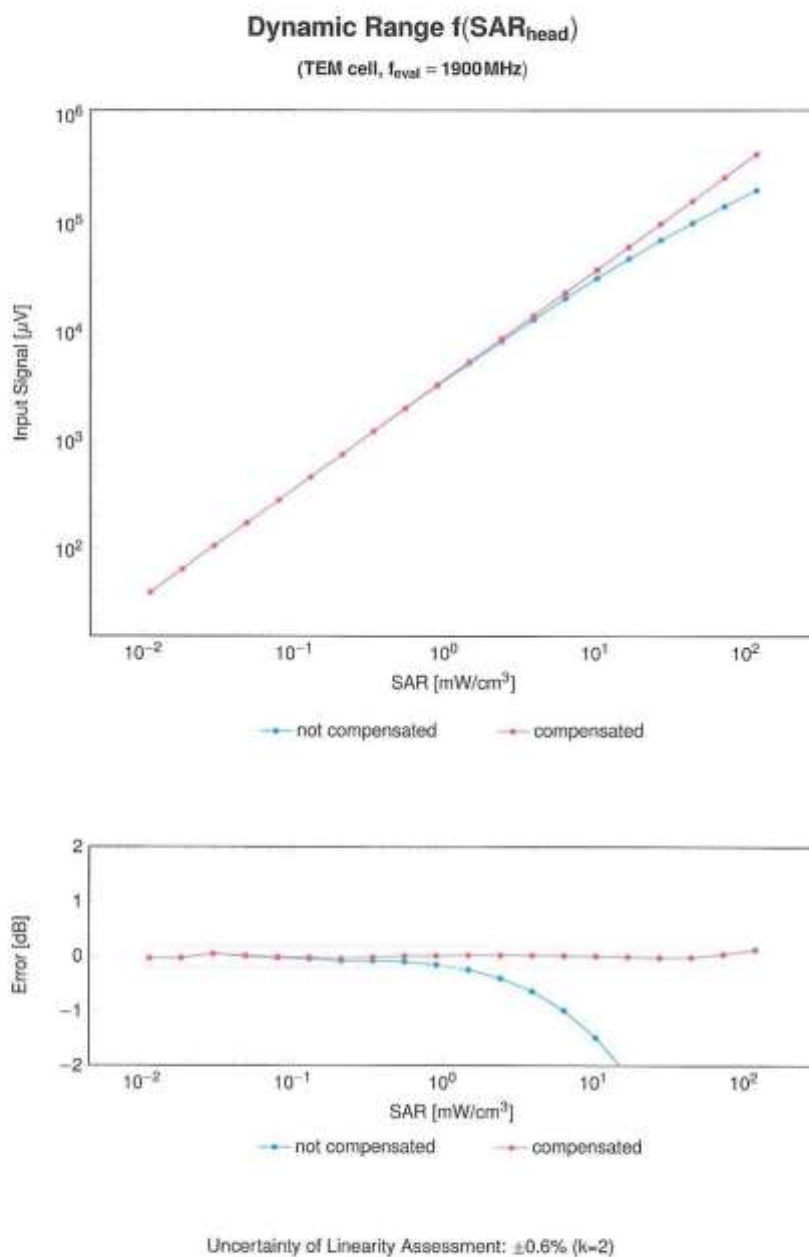
Receiving Pattern ( $\phi$ ),  $\theta = 0^\circ$ 

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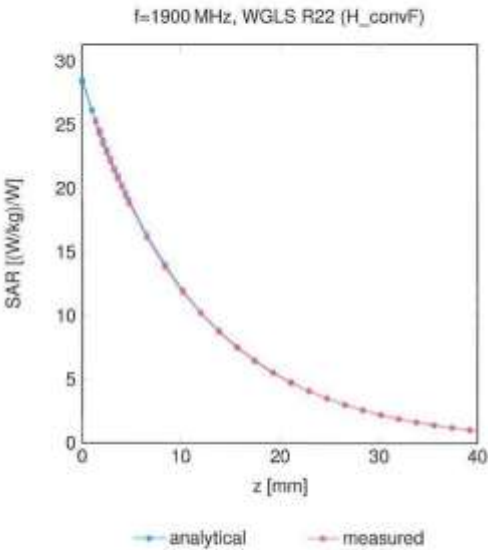
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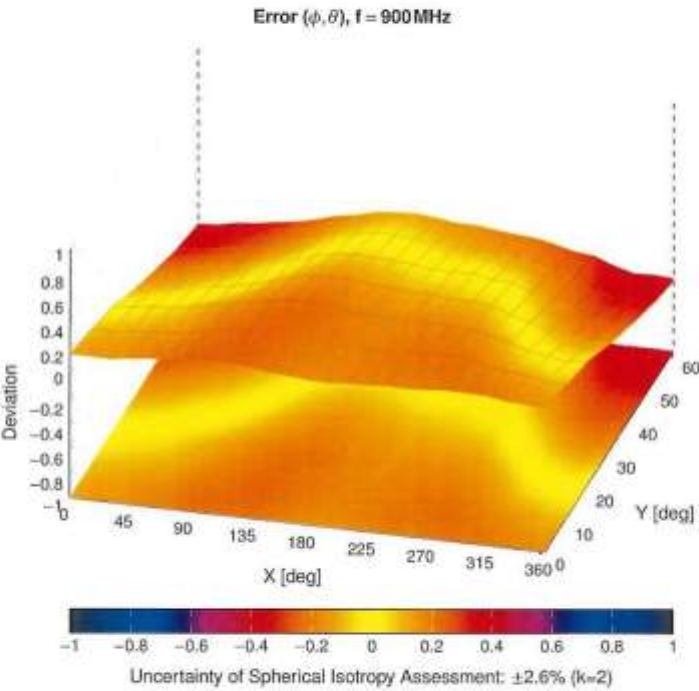
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Conversion Factor Assessment



Deviation from Isotropy in Liquid



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**Appendix: Modulation Calibration Parameters**

| UID   | Rev | Communication System Name                          | Group     | PAR (dB) | Unc <sup>2</sup> k = 2 |
|-------|-----|----------------------------------------------------|-----------|----------|------------------------|
| 0     |     | CW                                                 | CW        | 0.00     | ±4.7                   |
| 10010 | CAB | SAR Validation (Square, 100 ms, 10 ms)             | Test      | 10.00    | ±9.6                   |
| 10011 | CAC | UMTS-FDD (WCDMA)                                   | WCDMA     | 2.91     | ±9.6                   |
| 10012 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps)           | WLAN      | 1.87     | ±9.6                   |
| 10013 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps)      | WLAN      | 9.46     | ±9.6                   |
| 10021 | DAC | GSM-FDD (TDMA, GMSK)                               | GSM       | 9.39     | ±9.6                   |
| 10023 | DAC | GPRS-FDD (TDMA, GMSK, TN 0)                        | GSM       | 9.57     | ±9.6                   |
| 10024 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1)                      | GSM       | 6.56     | ±9.6                   |
| 10025 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0)                        | GSM       | 12.62    | ±9.6                   |
| 10026 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1)                      | GSM       | 9.55     | ±9.6                   |
| 10027 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2)                    | GSM       | 4.80     | ±9.6                   |
| 10028 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-1-2-3)                  | GSM       | 3.55     | ±9.6                   |
| 10029 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2)                    | GSM       | 7.78     | ±9.6                   |
| 10030 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH1)                | Bluetooth | 5.30     | ±9.6                   |
| 10031 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH3)                | Bluetooth | 1.67     | ±9.6                   |
| 10032 | CAA | IEEE 802.15.1 Bluetooth (GFSK, DH5)                | Bluetooth | 1.16     | ±9.6                   |
| 10033 | CAA | IEEE 802.15.1 Bluetooth (PI4-DQPSK, DH1)           | Bluetooth | 7.74     | ±9.6                   |
| 10034 | CAA | IEEE 802.15.1 Bluetooth (PI4-DQPSK, DH3)           | Bluetooth | 4.53     | ±9.6                   |
| 10035 | CAA | IEEE 802.15.1 Bluetooth (PI4-DQPSK, DH5)           | Bluetooth | 3.83     | ±9.6                   |
| 10036 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH1)              | Bluetooth | 8.01     | ±9.6                   |
| 10037 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH3)              | Bluetooth | 4.77     | ±9.6                   |
| 10038 | CAA | IEEE 802.15.1 Bluetooth (8-DPSK, DH5)              | Bluetooth | 4.10     | ±9.6                   |
| 10039 | CAB | CDMA2000 (1xRTT, RC1)                              | CDMA2000  | 4.57     | ±9.6                   |
| 10042 | CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI4-DQPSK, Fullrate) | AMPS      | 7.78     | ±9.6                   |
| 10044 | CAA | IS-81/EIA/TIA-553 FDD (FDMA, FM)                   | AMPS      | 0.00     | ±9.6                   |
| 10048 | CAA | DECT (TDD, TDMA/FDM, GFSK, Full Slot, 24)          | DECT      | 13.80    | ±9.6                   |
| 10049 | CAA | DECT (TDD, TDMA/FDM, GFSK, Double Slot, 12)        | DECT      | 10.79    | ±9.6                   |
| 10056 | CAA | UMTS-TDD (TD-SCDMA, 1.28 Mbps)                     | TD-SCDMA  | 11.01    | ±9.6                   |
| 10058 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-1-2-3)                  | GSM       | 6.52     | ±9.6                   |
| 10059 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps)           | WLAN      | 2.12     | ±9.6                   |
| 10060 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps)         | WLAN      | 2.83     | ±9.6                   |
| 10061 | CAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps)          | WLAN      | 3.60     | ±9.6                   |
| 10062 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 6 Mbps)           | WLAN      | 8.88     | ±9.6                   |
| 10063 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 9 Mbps)           | WLAN      | 8.63     | ±9.6                   |
| 10064 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 12 Mbps)          | WLAN      | 9.09     | ±9.6                   |
| 10065 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 18 Mbps)          | WLAN      | 9.00     | ±9.6                   |
| 10066 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 24 Mbps)          | WLAN      | 9.38     | ±9.6                   |
| 10067 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 36 Mbps)          | WLAN      | 10.12    | ±9.6                   |
| 10068 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 48 Mbps)          | WLAN      | 10.24    | ±9.6                   |
| 10069 | CAD | IEEE 802.11a/h WiFi 5 GHz (OFDM, 54 Mbps)          | WLAN      | 10.56    | ±9.6                   |
| 10071 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 9 Mbps)      | WLAN      | 9.83     | ±9.6                   |
| 10072 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 12 Mbps)     | WLAN      | 9.62     | ±9.6                   |
| 10073 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 18 Mbps)     | WLAN      | 9.94     | ±9.6                   |
| 10074 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 24 Mbps)     | WLAN      | 10.30    | ±9.6                   |
| 10075 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 36 Mbps)     | WLAN      | 10.77    | ±9.6                   |
| 10076 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 48 Mbps)     | WLAN      | 10.94    | ±9.6                   |
| 10077 | CAB | IEEE 802.11g WiFi 2.4 GHz (DSSS/OFDM, 54 Mbps)     | WLAN      | 11.00    | ±9.6                   |
| 10081 | CAB | CDMA2000 (1xRTT, RC3)                              | CDMA2000  | 3.97     | ±9.6                   |
| 10082 | CAB | IS-54 / IS-136 FDD (TDMA/FDM, PI4-DQPSK, Fullrate) | AMPS      | 4.77     | ±9.6                   |
| 10090 | DAC | GPRS-FDD (TDMA, GMSK, TN 0-4)                      | GSM       | 6.56     | ±9.6                   |
| 10097 | CAC | UMTS-FDD (HSDPA)                                   | WCDMA     | 3.98     | ±9.6                   |
| 10098 | CAC | UMTS-FDD (HSUPA, Subtest 2)                        | WCDMA     | 3.98     | ±9.6                   |
| 10099 | DAC | EDGE-FDD (TDMA, 8PSK, TN 0-4)                      | GSM       | 9.55     | ±9.6                   |
| 10100 | CAF | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, QPSK)           | LTE-FDD   | 5.67     | ±9.6                   |
| 10101 | CAF | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)         | LTE-FDD   | 6.42     | ±9.6                   |
| 10102 | CAF | LTE-FDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         | LTE-FDD   | 6.60     | ±9.6                   |
| 10103 | CAH | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK)           | LTE-TDD   | 9.29     | ±9.6                   |
| 10104 | CAH | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM)         | LTE-TDD   | 9.97     | ±9.6                   |
| 10105 | CAH | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM)         | LTE-TDD   | 10.01    | ±9.6                   |
| 10108 | CAH | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, QPSK)           | LTE-FDD   | 5.80     | ±9.6                   |
| 10109 | CAH | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)         | LTE-FDD   | 6.43     | ±9.6                   |
| 10110 | CAH | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, QPSK)            | LTE-FDD   | 5.75     | ±9.6                   |
| 10111 | CAH | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)          | LTE-FDD   | 6.44     | ±9.6                   |

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| UID   | Rev | Communication System Name                      | Group   | PAR (dB) | Unc <sup>±</sup> k = 2 |
|-------|-----|------------------------------------------------|---------|----------|------------------------|
| 10112 | CAH | LTE-FDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)     | LTE-FDD | 6.59     | ±9.6                   |
| 10113 | CAH | LTE-FDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)      | LTE-FDD | 6.62     | ±9.6                   |
| 10114 | CAD | IEEE 802.11n (HT Greenfield, 13.5 Mbps, BPSK)  | WLAN    | 8.10     | ±9.6                   |
| 10115 | CAD | IEEE 802.11n (HT Greenfield, 81 Mbps, 16-QAM)  | WLAN    | 8.46     | ±9.6                   |
| 10116 | CAD | IEEE 802.11n (HT Greenfield, 135 Mbps, 64-QAM) | WLAN    | 8.15     | ±9.6                   |
| 10117 | CAD | IEEE 802.11n (HT Mixed, 13.5 Mbps, BPSK)       | WLAN    | 8.97     | ±9.6                   |
| 10118 | CAD | IEEE 802.11n (HT Mixed, 81 Mbps, 16-QAM)       | WLAN    | 8.59     | ±9.6                   |
| 10119 | CAD | IEEE 802.11n (HT Mixed, 135 Mbps, 64-QAM)      | WLAN    | 8.13     | ±9.6                   |
| 10140 | CAF | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)     | LTE-FDD | 6.49     | ±9.6                   |
| 10141 | CAF | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)     | LTE-FDD | 6.53     | ±9.6                   |
| 10142 | CAF | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, QPSK)        | LTE-FDD | 5.73     | ±9.6                   |
| 10143 | CAF | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)      | LTE-FDD | 6.35     | ±9.6                   |
| 10144 | CAF | LTE-FDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)      | LTE-FDD | 6.85     | ±9.6                   |
| 10145 | CAG | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)      | LTE-FDD | 5.76     | ±9.6                   |
| 10146 | CAG | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)    | LTE-FDD | 6.41     | ±9.6                   |
| 10147 | CAG | LTE-FDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)    | LTE-FDD | 6.72     | ±9.6                   |
| 10149 | CAF | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)      | LTE-FDD | 6.42     | ±9.6                   |
| 10150 | CAF | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)      | LTE-FDD | 6.60     | ±9.6                   |
| 10151 | CAH | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK)        | LTE-TDD | 9.28     | ±9.6                   |
| 10152 | CAH | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM)      | LTE-TDD | 9.92     | ±9.6                   |
| 10153 | CAH | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM)      | LTE-TDD | 10.05    | ±9.6                   |
| 10154 | CAH | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, QPSK)        | LTE-FDD | 5.75     | ±9.6                   |
| 10155 | CAH | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)      | LTE-FDD | 6.43     | ±9.6                   |
| 10156 | CAH | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, QPSK)         | LTE-FDD | 5.79     | ±9.6                   |
| 10157 | CAH | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)       | LTE-FDD | 6.49     | ±9.6                   |
| 10158 | CAH | LTE-FDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)      | LTE-FDD | 6.62     | ±9.6                   |
| 10159 | CAH | LTE-FDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)       | LTE-FDD | 6.56     | ±9.6                   |
| 10160 | CAF | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, QPSK)        | LTE-FDD | 5.82     | ±9.6                   |
| 10161 | CAF | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)      | LTE-FDD | 6.43     | ±9.6                   |
| 10162 | CAF | LTE-FDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)      | LTE-FDD | 6.58     | ±9.6                   |
| 10166 | CAG | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)       | LTE-FDD | 5.46     | ±9.6                   |
| 10167 | CAG | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)     | LTE-FDD | 6.21     | ±9.6                   |
| 10168 | CAG | LTE-FDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)     | LTE-FDD | 6.79     | ±9.6                   |
| 10169 | CAF | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, QPSK)          | LTE-FDD | 5.73     | ±9.6                   |
| 10170 | CAF | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)        | LTE-FDD | 6.52     | ±9.6                   |
| 10171 | AAF | LTE-FDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)        | LTE-FDD | 6.49     | ±9.6                   |
| 10172 | CAH | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK)          | LTE-TDD | 9.21     | ±9.6                   |
| 10173 | CAH | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM)        | LTE-TDD | 9.45     | ±9.6                   |
| 10174 | CAH | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM)        | LTE-TDD | 10.25    | ±9.6                   |
| 10175 | CAH | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, QPSK)          | LTE-FDD | 5.72     | ±9.6                   |
| 10176 | CAH | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)        | LTE-FDD | 6.52     | ±9.6                   |
| 10177 | CAJ | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, QPSK)           | LTE-FDD | 5.73     | ±9.6                   |
| 10178 | CAH | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)         | LTE-FDD | 6.52     | ±9.6                   |
| 10179 | CAH | LTE-FDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)        | LTE-FDD | 6.50     | ±9.6                   |
| 10180 | CAH | LTE-FDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)         | LTE-FDD | 6.50     | ±9.6                   |
| 10181 | CAF | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, QPSK)          | LTE-FDD | 5.72     | ±9.6                   |
| 10182 | CAF | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)        | LTE-FDD | 6.52     | ±9.6                   |
| 10183 | AAE | LTE-FDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)        | LTE-FDD | 6.50     | ±9.6                   |
| 10184 | CAF | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, QPSK)           | LTE-FDD | 5.73     | ±9.6                   |
| 10185 | CAF | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)         | LTE-FDD | 6.51     | ±9.6                   |
| 10186 | AAF | LTE-FDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)         | LTE-FDD | 6.50     | ±9.6                   |
| 10187 | CAG | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)         | LTE-FDD | 5.73     | ±9.6                   |
| 10188 | CAG | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)       | LTE-FDD | 6.52     | ±9.6                   |
| 10189 | AAG | LTE-FDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)       | LTE-FDD | 6.50     | ±9.6                   |
| 10193 | CAD | IEEE 802.11n (HT Greenfield, 6.5 Mbps, BPSK)   | WLAN    | 8.09     | ±9.6                   |
| 10194 | CAD | IEEE 802.11n (HT Greenfield, 39 Mbps, 16-QAM)  | WLAN    | 8.12     | ±9.6                   |
| 10195 | CAD | IEEE 802.11n (HT Greenfield, 65 Mbps, 64-QAM)  | WLAN    | 8.21     | ±9.6                   |
| 10196 | CAD | IEEE 802.11n (HT Mixed, 6.5 Mbps, BPSK)        | WLAN    | 8.10     | ±9.6                   |
| 10197 | CAD | IEEE 802.11n (HT Mixed, 39 Mbps, 16-QAM)       | WLAN    | 8.13     | ±9.6                   |
| 10198 | CAD | IEEE 802.11n (HT Mixed, 65 Mbps, 64-QAM)       | WLAN    | 8.27     | ±9.6                   |
| 10219 | CAD | IEEE 802.11n (HT Mixed, 7.2 Mbps, BPSK)        | WLAN    | 8.03     | ±9.6                   |
| 10220 | CAD | IEEE 802.11n (HT Mixed, 43.3 Mbps, 16-QAM)     | WLAN    | 8.13     | ±9.6                   |
| 10221 | CAD | IEEE 802.11n (HT Mixed, 72.2 Mbps, 64-QAM)     | WLAN    | 8.27     | ±9.6                   |
| 10222 | CAD | IEEE 802.11n (HT Mixed, 15 Mbps, BPSK)         | WLAN    | 8.06     | ±9.6                   |
| 10223 | CAD | IEEE 802.11n (HT Mixed, 90 Mbps, 16-QAM)       | WLAN    | 8.48     | ±9.6                   |
| 10224 | CAD | IEEE 802.11n (HT Mixed, 150 Mbps, 64-QAM)      | WLAN    | 8.06     | ±9.6                   |

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| UID   | Rev | Communication System Name                                            | Group    | PAR (dB) | Unc <sup>F</sup> k = 2 |
|-------|-----|----------------------------------------------------------------------|----------|----------|------------------------|
| 10225 | CAC | UMTS-FDD (HSFPA+)                                                    | WCDMA    | 5.97     | ±9.6                   |
| 10226 | CAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM)                             | LTE-TDD  | 9.49     | ±9.6                   |
| 10227 | CAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM)                             | LTE-TDD  | 10.26    | ±9.6                   |
| 10228 | CAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK)                               | LTE-TDD  | 9.22     | ±9.6                   |
| 10229 | CAE | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM)                               | LTE-TDD  | 9.48     | ±9.6                   |
| 10230 | CAE | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM)                               | LTE-TDD  | 10.25    | ±9.6                   |
| 10231 | CAE | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK)                                 | LTE-TDD  | 9.19     | ±9.6                   |
| 10232 | CAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM)                               | LTE-TDD  | 9.49     | ±9.6                   |
| 10233 | CAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM)                               | LTE-TDD  | 10.25    | ±9.6                   |
| 10234 | CAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK)                                 | LTE-TDD  | 9.21     | ±9.6                   |
| 10235 | CAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM)                              | LTE-TDD  | 9.48     | ±9.6                   |
| 10236 | CAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM)                              | LTE-TDD  | 10.25    | ±9.6                   |
| 10237 | CAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK)                                | LTE-TDD  | 9.21     | ±9.6                   |
| 10238 | CAG | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM)                              | LTE-TDD  | 9.48     | ±9.6                   |
| 10239 | CAG | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM)                              | LTE-TDD  | 10.25    | ±9.6                   |
| 10240 | CAG | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK)                                | LTE-TDD  | 9.21     | ±9.6                   |
| 10241 | CAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM)                           | LTE-TDD  | 9.82     | ±9.6                   |
| 10242 | CAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM)                           | LTE-TDD  | 9.86     | ±9.6                   |
| 10243 | CAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK)                             | LTE-TDD  | 9.46     | ±9.6                   |
| 10244 | CAE | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                             | LTE-TDD  | 10.06    | ±9.6                   |
| 10245 | CAE | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                             | LTE-TDD  | 10.06    | ±9.6                   |
| 10246 | CAE | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                               | LTE-TDD  | 9.30     | ±9.6                   |
| 10247 | CAH | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM)                             | LTE-TDD  | 9.91     | ±9.6                   |
| 10248 | CAH | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM)                             | LTE-TDD  | 10.09    | ±9.6                   |
| 10249 | CAH | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK)                               | LTE-TDD  | 9.29     | ±9.6                   |
| 10250 | CAH | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM)                            | LTE-TDD  | 9.81     | ±9.6                   |
| 10251 | CAH | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM)                            | LTE-TDD  | 10.17    | ±9.6                   |
| 10252 | CAH | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK)                              | LTE-TDD  | 9.24     | ±9.6                   |
| 10253 | CAG | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM)                            | LTE-TDD  | 9.80     | ±9.6                   |
| 10254 | CAG | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM)                            | LTE-TDD  | 10.14    | ±9.6                   |
| 10255 | CAG | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK)                              | LTE-TDD  | 9.20     | ±9.6                   |
| 10256 | CAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM)                          | LTE-TDD  | 9.86     | ±9.6                   |
| 10257 | CAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM)                          | LTE-TDD  | 10.08    | ±9.6                   |
| 10258 | CAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK)                            | LTE-TDD  | 9.34     | ±9.6                   |
| 10259 | CAE | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM)                            | LTE-TDD  | 9.88     | ±9.6                   |
| 10260 | CAE | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM)                            | LTE-TDD  | 9.97     | ±9.6                   |
| 10261 | CAE | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK)                              | LTE-TDD  | 9.24     | ±9.6                   |
| 10262 | CAH | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM)                            | LTE-TDD  | 9.83     | ±9.6                   |
| 10263 | CAH | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM)                            | LTE-TDD  | 10.16    | ±9.6                   |
| 10264 | CAH | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK)                              | LTE-TDD  | 9.23     | ±9.6                   |
| 10265 | CAH | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM)                           | LTE-TDD  | 9.82     | ±9.6                   |
| 10266 | CAH | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM)                           | LTE-TDD  | 10.07    | ±9.6                   |
| 10267 | CAH | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK)                             | LTE-TDD  | 9.30     | ±9.6                   |
| 10268 | CAG | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM)                           | LTE-TDD  | 10.06    | ±9.6                   |
| 10269 | CAG | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM)                           | LTE-TDD  | 10.13    | ±9.6                   |
| 10270 | CAG | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                             | LTE-TDD  | 9.58     | ±9.6                   |
| 10274 | CAC | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.10)                            | WCDMA    | 4.87     | ±9.6                   |
| 10275 | CAC | UMTS-FDD (HSUPA, Subtest 5, 3GPP Rel8.4)                             | WCDMA    | 3.96     | ±9.6                   |
| 10277 | CAA | PHS (QPSK)                                                           | PHS      | 11.81    | ±9.6                   |
| 10278 | CAA | PHS (QPSK, BW 884 MHz, Roll-off 0.5)                                 | PHS      | 11.81    | ±9.6                   |
| 10279 | CAA | PHS (QPSK, BW 884 MHz, Roll-off 0.38)                                | PHS      | 12.18    | ±9.6                   |
| 10290 | AAB | CDMA2000, RC1, SC55, Full Rate                                       | CDMA2000 | 3.91     | ±9.6                   |
| 10291 | AAB | CDMA2000, RC3, SC55, Full Rate                                       | CDMA2000 | 3.46     | ±9.6                   |
| 10292 | AAB | CDMA2000, RC3, SC32, Full Rate                                       | CDMA2000 | 3.39     | ±9.6                   |
| 10293 | AAB | CDMA2000, RC3, SC3, Full Rate                                        | CDMA2000 | 3.50     | ±9.6                   |
| 10295 | AAB | CDMA2000, RC1, SC3, 1/8th Rate 25 kb                                 | CDMA2000 | 12.49    | ±9.6                   |
| 10297 | AAE | LTE-FDD (SC-FDMA, 50% RB, 20 MHz, QPSK)                              | LTE-FDD  | 5.81     | ±9.6                   |
| 10298 | AAE | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, QPSK)                               | LTE-FDD  | 5.72     | ±9.6                   |
| 10299 | AAE | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM)                             | LTE-FDD  | 6.39     | ±9.6                   |
| 10300 | AAE | LTE-FDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM)                             | LTE-FDD  | 6.60     | ±9.6                   |
| 10301 | AAA | IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC)                 | WiMAX    | 12.03    | ±9.6                   |
| 10302 | AAA | IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, QPSK, PUSC, 3 CTRL symbols) | WiMAX    | 12.57    | ±9.6                   |
| 10303 | AAA | IEEE 802.16e WiMAX (31:15, 5 ms, 10 MHz, 64QAM, PUSC)                | WiMAX    | 12.52    | ±9.6                   |
| 10304 | AAA | IEEE 802.16e WiMAX (29:18, 5 ms, 10 MHz, 64QAM, PUSC)                | WiMAX    | 11.86    | ±9.6                   |
| 10305 | AAA | IEEE 802.16e WiMAX (31:15, 10 ms, 10 MHz, 64QAM, PUSC, 15 symbols)   | WiMAX    | 15.24    | ±9.6                   |
| 10306 | AAA | IEEE 802.16e WiMAX (29:18, 10 ms, 10 MHz, 64QAM, PUSC, 18 symbols)   | WiMAX    | 14.67    | ±9.6                   |

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| UID   | Rev | Communication System Name                                                       | Group    | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|---------------------------------------------------------------------------------|----------|----------|------------------------|
| 10307 | AAA | IEEE 802.16e WMAX (29-18, 10 ms, 10 MHz, QPSK, PUSC, 18 symbols)                | WIMAX    | 14.49    | ±9.6                   |
| 10308 | AAA | IEEE 802.16e WMAX (29-18, 10 ms, 10 MHz, 16QAM, PUSC)                           | WIMAX    | 14.46    | ±9.6                   |
| 10309 | AAA | IEEE 802.16e WMAX (29-18, 10 ms, 10 MHz, 16QAM, AMC 2x3, 18 symbols)            | WIMAX    | 14.58    | ±9.6                   |
| 10310 | AAA | IEEE 802.16e WMAX (29-18, 10 ms, 10 MHz, QPSK, AMC 2x3, 18 symbols)             | WIMAX    | 14.57    | ±9.6                   |
| 10311 | AAE | LTE-FDD (SC-FDMA, 100% RB, 15 MHz, QPSK)                                        | LTE-FDD  | 6.06     | ±9.6                   |
| 10313 | AAA | IDEN 1.3                                                                        | IDEN     | 10.51    | ±9.6                   |
| 10314 | AAA | IDEN 1.6                                                                        | IDEN     | 13.48    | ±9.6                   |
| 10315 | AAB | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)                       | WLAN     | 1.71     | ±9.6                   |
| 10316 | AAB | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)                   | WLAN     | 8.36     | ±9.6                   |
| 10317 | AAD | IEEE 802.11a WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)                         | WLAN     | 8.36     | ±9.6                   |
| 10352 | AAA | Pulse Waveform (200Hz, 10%)                                                     | Generic  | 10.00    | ±9.6                   |
| 10353 | AAA | Pulse Waveform (200Hz, 20%)                                                     | Generic  | 6.99     | ±9.6                   |
| 10354 | AAA | Pulse Waveform (200Hz, 40%)                                                     | Generic  | 3.98     | ±9.6                   |
| 10355 | AAA | Pulse Waveform (200Hz, 60%)                                                     | Generic  | 2.22     | ±9.6                   |
| 10356 | AAA | Pulse Waveform (200Hz, 80%)                                                     | Generic  | 0.97     | ±9.6                   |
| 10387 | AAA | QPSK Waveform, 1 MHz                                                            | Generic  | 5.10     | ±9.6                   |
| 10388 | AAA | QPSK Waveform, 10 MHz                                                           | Generic  | 5.22     | ±9.6                   |
| 10386 | AAA | 64-QAM Waveform, 100 kHz                                                        | Generic  | 6.27     | ±9.6                   |
| 10399 | AAA | 64-QAM Waveform, 40 MHz                                                         | Generic  | 6.27     | ±9.6                   |
| 10400 | AAE | IEEE 802.11ac WiFi (20 MHz, 64-QAM, 96pc duty cycle)                            | WLAN     | 8.37     | ±9.6                   |
| 10401 | AAE | IEEE 802.11ac WiFi (40 MHz, 64-QAM, 96pc duty cycle)                            | WLAN     | 8.60     | ±9.6                   |
| 10402 | AAE | IEEE 802.11ac WiFi (80 MHz, 64-QAM, 96pc duty cycle)                            | WLAN     | 8.53     | ±9.6                   |
| 10403 | AAB | CDMA2000 (1xEV-DO, Rev. 0)                                                      | CDMA2000 | 3.76     | ±9.6                   |
| 10404 | AAB | CDMA2000 (1xEV-DO, Rev. A)                                                      | CDMA2000 | 3.77     | ±9.6                   |
| 10406 | AAB | CDMA2000, RC3, SO32, SCH0, Full Rate                                            | CDMA2000 | 5.22     | ±9.6                   |
| 10410 | AAH | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9, Subframe Cont=4) | LTE-TDD  | 7.82     | ±9.6                   |
| 10414 | AAA | WLAN CDDF, 64-QAM, 40 MHz                                                       | Generic  | 8.64     | ±9.6                   |
| 10415 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1 Mbps, 96pc duty cycle)                       | WLAN     | 1.54     | ±9.6                   |
| 10416 | AAA | IEEE 802.11g WiFi 2.4 GHz (ERP-OFDM, 6 Mbps, 96pc duty cycle)                   | WLAN     | 8.23     | ±9.6                   |
| 10417 | AAC | IEEE 802.11a/b WiFi 5 GHz (OFDM, 6 Mbps, 96pc duty cycle)                       | WLAN     | 8.23     | ±9.6                   |
| 10418 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 96pc duty cycle, Long preamble)   | WLAN     | 8.14     | ±9.6                   |
| 10419 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6 Mbps, 96pc duty cycle, Short preamble)  | WLAN     | 8.19     | ±9.6                   |
| 10422 | AAC | IEEE 802.11n (HT Greenfield, 7.2 Mbps, BPSK)                                    | WLAN     | 8.32     | ±9.6                   |
| 10423 | AAC | IEEE 802.11n (HT Greenfield, 43.3 Mbps, 16-QAM)                                 | WLAN     | 8.47     | ±9.6                   |
| 10424 | AAC | IEEE 802.11n (HT Greenfield, 72.2 Mbps, 64-QAM)                                 | WLAN     | 8.40     | ±9.6                   |
| 10425 | AAC | IEEE 802.11n (HT Greenfield, 15 Mbps, BPSK)                                     | WLAN     | 8.41     | ±9.6                   |
| 10428 | AAC | IEEE 802.11n (HT Greenfield, 90 Mbps, 16-QAM)                                   | WLAN     | 8.45     | ±9.6                   |
| 10427 | AAC | IEEE 802.11n (HT Greenfield, 150 Mbps, 64-QAM)                                  | WLAN     | 8.41     | ±9.6                   |
| 10430 | AAE | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1)                                                | LTE-FDD  | 8.28     | ±9.6                   |
| 10431 | AAE | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1)                                               | LTE-FDD  | 8.38     | ±9.6                   |
| 10432 | AAD | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1)                                               | LTE-FDD  | 8.34     | ±9.6                   |
| 10433 | AAD | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1)                                               | LTE-FDD  | 8.34     | ±9.6                   |
| 10434 | AAB | W-CDMA (BS Test Model 1, 64 DPCCH)                                              | WCDMA    | 8.90     | ±9.6                   |
| 10435 | AAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                  | LTE-TDD  | 7.82     | ±9.6                   |
| 10447 | AAE | LTE-FDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)                                  | LTE-FDD  | 7.56     | ±9.6                   |
| 10448 | AAE | LTE-FDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)                                 | LTE-FDD  | 7.53     | ±9.6                   |
| 10449 | AAD | LTE-FDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)                                 | LTE-FDD  | 7.51     | ±9.6                   |
| 10450 | AAD | LTE-FDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)                                 | LTE-FDD  | 7.48     | ±9.6                   |
| 10451 | AAB | W-CDMA (BS Test Model 1, 64 DPCCH, Clipping 44%)                                | WCDMA    | 7.59     | ±9.6                   |
| 10453 | AAE | Validation (Square, 10 ms, 1 ms)                                                | Test     | 10.00    | ±9.6                   |
| 10456 | AAC | IEEE 802.11ac WiFi (160 MHz, 64-QAM, 96pc duty cycle)                           | WLAN     | 8.63     | ±9.6                   |
| 10457 | AAB | UMTS-FDD (DC-HSDPA)                                                             | WCDMA    | 9.62     | ±9.6                   |
| 10458 | AAA | CDMA2000 (1xEV-DO, Rev. B, 2 carriers)                                          | CDMA2000 | 6.55     | ±9.6                   |
| 10459 | AAA | CDMA2000 (1xEV-DO, Rev. B, 3 carriers)                                          | CDMA2000 | 8.25     | ±9.6                   |
| 10460 | AAB | UMTS-FDD (WCDMA, AMR)                                                           | WCDMA    | 2.39     | ±9.6                   |
| 10461 | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                 | LTE-TDD  | 7.82     | ±9.6                   |
| 10462 | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)               | LTE-TDD  | 8.30     | ±9.6                   |
| 10463 | AAC | LTE-TDD (SC-FDMA, 1 RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)               | LTE-TDD  | 8.56     | ±9.6                   |
| 10464 | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                   | LTE-TDD  | 7.82     | ±9.6                   |
| 10465 | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)                 | LTE-TDD  | 8.32     | ±9.6                   |
| 10466 | AAD | LTE-TDD (SC-FDMA, 1 RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)                 | LTE-TDD  | 8.67     | ±9.6                   |
| 10467 | AAG | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                   | LTE-TDD  | 7.82     | ±9.6                   |
| 10468 | AAG | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)                 | LTE-TDD  | 8.32     | ±9.6                   |
| 10469 | AAG | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)                 | LTE-TDD  | 8.56     | ±9.6                   |
| 10470 | AAG | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)                  | LTE-TDD  | 7.82     | ±9.6                   |
| 10471 | AAG | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)                | LTE-TDD  | 8.32     | ±9.6                   |

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| UID   | Rev | Communication System Name                                            | Group   | PAR (dB) | Unc <sup>6</sup> k = 2 |
|-------|-----|----------------------------------------------------------------------|---------|----------|------------------------|
| 10472 | AAG | LTE-TDD (SC-FDMA, 1 RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 8.57     | ±9.6                   |
| 10473 | AAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)       | LTE-TDD | 7.82     | ±9.6                   |
| 10474 | AAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 8.32     | ±9.6                   |
| 10475 | AAF | LTE-TDD (SC-FDMA, 1 RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 8.57     | ±9.6                   |
| 10477 | AAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 8.32     | ±9.6                   |
| 10478 | AAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 8.57     | ±9.6                   |
| 10479 | AAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.74     | ±9.6                   |
| 10480 | AAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.18     | ±9.6                   |
| 10481 | AAC | LTE-TDD (SC-FDMA, 50% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.45     | ±9.6                   |
| 10482 | AAD | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)      | LTE-TDD | 7.71     | ±9.6                   |
| 10483 | AAD | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 8.29     | ±9.6                   |
| 10484 | AAD | LTE-TDD (SC-FDMA, 50% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 8.47     | ±9.6                   |
| 10485 | AAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)      | LTE-TDD | 7.59     | ±9.6                   |
| 10486 | AAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 8.38     | ±9.6                   |
| 10487 | AAG | LTE-TDD (SC-FDMA, 50% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 8.60     | ±9.6                   |
| 10488 | AAG | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.70     | ±9.6                   |
| 10489 | AAC | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.31     | ±9.6                   |
| 10490 | AAG | LTE-TDD (SC-FDMA, 50% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.54     | ±9.6                   |
| 10491 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.74     | ±9.6                   |
| 10492 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.41     | ±9.6                   |
| 10493 | AAF | LTE-TDD (SC-FDMA, 50% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.65     | ±9.6                   |
| 10494 | AAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.74     | ±9.6                   |
| 10495 | AAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.37     | ±9.6                   |
| 10496 | AAG | LTE-TDD (SC-FDMA, 50% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.54     | ±9.6                   |
| 10497 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, QPSK, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 7.67     | ±9.6                   |
| 10498 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.40     | ±9.6                   |
| 10499 | AAC | LTE-TDD (SC-FDMA, 100% RB, 1.4 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9) | LTE-TDD | 8.68     | ±9.6                   |
| 10500 | AAD | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.67     | ±9.6                   |
| 10501 | AAD | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.44     | ±9.6                   |
| 10502 | AAD | LTE-TDD (SC-FDMA, 100% RB, 3 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.52     | ±9.6                   |
| 10503 | AAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, QPSK, UL Subframe=2,3,4,7,8,9)     | LTE-TDD | 7.72     | ±9.6                   |
| 10504 | AAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.31     | ±9.6                   |
| 10505 | AAG | LTE-TDD (SC-FDMA, 100% RB, 5 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)   | LTE-TDD | 8.54     | ±9.6                   |
| 10506 | AAG | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.74     | ±9.6                   |
| 10507 | AAG | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.36     | ±9.6                   |
| 10508 | AAG | LTE-TDD (SC-FDMA, 100% RB, 10 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.55     | ±9.6                   |
| 10509 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.99     | ±9.6                   |
| 10510 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.49     | ±9.6                   |
| 10511 | AAF | LTE-TDD (SC-FDMA, 100% RB, 15 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.51     | ±9.6                   |
| 10512 | AAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, QPSK, UL Subframe=2,3,4,7,8,9)    | LTE-TDD | 7.74     | ±9.6                   |
| 10513 | AAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 16-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.42     | ±9.6                   |
| 10514 | AAG | LTE-TDD (SC-FDMA, 100% RB, 20 MHz, 64-QAM, UL Subframe=2,3,4,7,8,9)  | LTE-TDD | 8.45     | ±9.6                   |
| 10515 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2 Mbps, 99pc duty cycle)            | WLAN    | 1.56     | ±9.6                   |
| 10516 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5 Mbps, 99pc duty cycle)          | WLAN    | 1.57     | ±9.6                   |
| 10517 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11 Mbps, 99pc duty cycle)           | WLAN    | 1.58     | ±9.6                   |
| 10518 | AAC | IEEE 802.11a/n WiFi 5 GHz (OFDM, 9 Mbps, 99pc duty cycle)            | WLAN    | 8.23     | ±9.6                   |
| 10519 | AAC | IEEE 802.11a/n WiFi 5 GHz (OFDM, 12 Mbps, 99pc duty cycle)           | WLAN    | 8.39     | ±9.6                   |
| 10520 | AAC | IEEE 802.11a/n WiFi 5 GHz (OFDM, 18 Mbps, 99pc duty cycle)           | WLAN    | 8.12     | ±9.6                   |
| 10521 | AAC | IEEE 802.11a/n WiFi 5 GHz (OFDM, 24 Mbps, 99pc duty cycle)           | WLAN    | 7.97     | ±9.6                   |
| 10522 | AAC | IEEE 802.11a/n WiFi 5 GHz (OFDM, 36 Mbps, 99pc duty cycle)           | WLAN    | 8.45     | ±9.6                   |
| 10523 | AAC | IEEE 802.11a/n WiFi 5 GHz (OFDM, 48 Mbps, 99pc duty cycle)           | WLAN    | 8.08     | ±9.6                   |
| 10524 | AAC | IEEE 802.11a/n WiFi 5 GHz (OFDM, 54 Mbps, 99pc duty cycle)           | WLAN    | 8.27     | ±9.6                   |
| 10525 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS0, 99pc duty cycle)                   | WLAN    | 8.36     | ±9.6                   |
| 10526 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS1, 99pc duty cycle)                   | WLAN    | 8.42     | ±9.6                   |
| 10527 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS2, 99pc duty cycle)                   | WLAN    | 8.21     | ±9.6                   |
| 10528 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS3, 99pc duty cycle)                   | WLAN    | 8.38     | ±9.6                   |
| 10529 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS4, 99pc duty cycle)                   | WLAN    | 8.36     | ±9.6                   |
| 10531 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS6, 99pc duty cycle)                   | WLAN    | 8.43     | ±9.6                   |
| 10532 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS7, 99pc duty cycle)                   | WLAN    | 8.29     | ±9.6                   |
| 10533 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS8, 99pc duty cycle)                   | WLAN    | 8.38     | ±9.6                   |
| 10534 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS0, 99pc duty cycle)                   | WLAN    | 8.45     | ±9.6                   |
| 10535 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS1, 99pc duty cycle)                   | WLAN    | 8.45     | ±9.6                   |
| 10536 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS2, 99pc duty cycle)                   | WLAN    | 8.32     | ±9.6                   |
| 10537 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS3, 99pc duty cycle)                   | WLAN    | 8.44     | ±9.6                   |
| 10538 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS4, 99pc duty cycle)                   | WLAN    | 8.54     | ±9.6                   |
| 10540 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS6, 99pc duty cycle)                   | WLAN    | 8.39     | ±9.6                   |

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| UID   | Rev | Communication System Name                                      | Group | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|----------------------------------------------------------------|-------|----------|------------------------|
| 10541 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS7, 99pc duty cycle)             | WLAN  | 8.46     | ±9.6                   |
| 10542 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS8, 99pc duty cycle)             | WLAN  | 8.65     | ±9.6                   |
| 10543 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS9, 99pc duty cycle)             | WLAN  | 8.65     | ±9.6                   |
| 10544 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle)             | WLAN  | 8.47     | ±9.6                   |
| 10545 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS1, 99pc duty cycle)             | WLAN  | 8.55     | ±9.6                   |
| 10546 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS2, 99pc duty cycle)             | WLAN  | 8.35     | ±9.6                   |
| 10547 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS3, 99pc duty cycle)             | WLAN  | 8.49     | ±9.6                   |
| 10548 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS4, 99pc duty cycle)             | WLAN  | 8.37     | ±9.6                   |
| 10550 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS5, 99pc duty cycle)             | WLAN  | 8.38     | ±9.6                   |
| 10551 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS7, 99pc duty cycle)             | WLAN  | 8.50     | ±9.6                   |
| 10552 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS0, 99pc duty cycle)             | WLAN  | 8.42     | ±9.6                   |
| 10553 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS8, 99pc duty cycle)             | WLAN  | 8.45     | ±9.6                   |
| 10554 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS0, 99pc duty cycle)            | WLAN  | 8.48     | ±9.6                   |
| 10555 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS1, 99pc duty cycle)            | WLAN  | 8.47     | ±9.6                   |
| 10556 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS2, 99pc duty cycle)            | WLAN  | 8.50     | ±9.6                   |
| 10557 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS3, 99pc duty cycle)            | WLAN  | 8.52     | ±9.6                   |
| 10558 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS4, 99pc duty cycle)            | WLAN  | 8.61     | ±9.6                   |
| 10560 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS6, 99pc duty cycle)            | WLAN  | 8.73     | ±9.6                   |
| 10561 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS7, 99pc duty cycle)            | WLAN  | 8.56     | ±9.6                   |
| 10562 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS8, 99pc duty cycle)            | WLAN  | 8.69     | ±9.6                   |
| 10563 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS9, 99pc duty cycle)            | WLAN  | 8.77     | ±9.6                   |
| 10564 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9Mbps, 99pc duty cycle)  | WLAN  | 8.25     | ±9.6                   |
| 10565 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12Mbps, 99pc duty cycle) | WLAN  | 8.45     | ±9.6                   |
| 10566 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18Mbps, 99pc duty cycle) | WLAN  | 8.13     | ±9.6                   |
| 10567 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24Mbps, 99pc duty cycle) | WLAN  | 8.00     | ±9.6                   |
| 10568 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36Mbps, 99pc duty cycle) | WLAN  | 8.37     | ±9.6                   |
| 10569 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48Mbps, 99pc duty cycle) | WLAN  | 8.10     | ±9.6                   |
| 10570 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54Mbps, 99pc duty cycle) | WLAN  | 8.30     | ±9.6                   |
| 10571 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 1Mbps, 90pc duty cycle)       | WLAN  | 1.99     | ±9.6                   |
| 10572 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 2Mbps, 90pc duty cycle)       | WLAN  | 1.99     | ±9.6                   |
| 10573 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 5.5Mbps, 90pc duty cycle)     | WLAN  | 1.98     | ±9.6                   |
| 10574 | AAA | IEEE 802.11b WiFi 2.4 GHz (DSSS, 11Mbps, 90pc duty cycle)      | WLAN  | 1.98     | ±9.6                   |
| 10575 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 6Mbps, 90pc duty cycle)  | WLAN  | 8.59     | ±9.6                   |
| 10576 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 9Mbps, 90pc duty cycle)  | WLAN  | 8.60     | ±9.6                   |
| 10577 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 12Mbps, 90pc duty cycle) | WLAN  | 8.70     | ±9.6                   |
| 10578 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 18Mbps, 90pc duty cycle) | WLAN  | 8.49     | ±9.6                   |
| 10579 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 24Mbps, 90pc duty cycle) | WLAN  | 8.36     | ±9.6                   |
| 10580 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 36Mbps, 90pc duty cycle) | WLAN  | 8.76     | ±9.6                   |
| 10581 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 48Mbps, 90pc duty cycle) | WLAN  | 8.35     | ±9.6                   |
| 10582 | AAA | IEEE 802.11g WiFi 2.4 GHz (DSSS-OFDM, 54Mbps, 90pc duty cycle) | WLAN  | 8.67     | ±9.6                   |
| 10583 | AAC | IEEE 802.11ah WiFi 5 GHz (OFDM, 6Mbps, 90pc duty cycle)        | WLAN  | 8.58     | ±9.6                   |
| 10584 | AAC | IEEE 802.11ah WiFi 5 GHz (OFDM, 9Mbps, 90pc duty cycle)        | WLAN  | 8.60     | ±9.6                   |
| 10585 | AAC | IEEE 802.11ah WiFi 5 GHz (OFDM, 12Mbps, 90pc duty cycle)       | WLAN  | 8.70     | ±9.6                   |
| 10586 | AAC | IEEE 802.11ah WiFi 5 GHz (OFDM, 18Mbps, 90pc duty cycle)       | WLAN  | 8.49     | ±9.6                   |
| 10587 | AAC | IEEE 802.11ah WiFi 5 GHz (OFDM, 24Mbps, 90pc duty cycle)       | WLAN  | 8.36     | ±9.6                   |
| 10588 | AAC | IEEE 802.11ah WiFi 5 GHz (OFDM, 36Mbps, 90pc duty cycle)       | WLAN  | 8.76     | ±9.6                   |
| 10589 | AAC | IEEE 802.11ah WiFi 5 GHz (OFDM, 48Mbps, 90pc duty cycle)       | WLAN  | 8.35     | ±9.6                   |
| 10590 | AAC | IEEE 802.11ah WiFi 5 GHz (OFDM, 54Mbps, 90pc duty cycle)       | WLAN  | 8.67     | ±9.6                   |
| 10591 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS0, 90pc duty cycle)         | WLAN  | 8.63     | ±9.6                   |
| 10592 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS1, 90pc duty cycle)         | WLAN  | 8.78     | ±9.6                   |
| 10593 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS2, 90pc duty cycle)         | WLAN  | 8.64     | ±9.6                   |
| 10594 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS3, 90pc duty cycle)         | WLAN  | 8.74     | ±9.6                   |
| 10595 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS4, 90pc duty cycle)         | WLAN  | 8.74     | ±9.6                   |
| 10596 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS5, 90pc duty cycle)         | WLAN  | 8.71     | ±9.6                   |
| 10597 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS6, 90pc duty cycle)         | WLAN  | 8.72     | ±9.6                   |
| 10598 | AAC | IEEE 802.11n (HT Mixed, 20 MHz, MCS7, 90pc duty cycle)         | WLAN  | 8.50     | ±9.6                   |
| 10599 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS0, 90pc duty cycle)         | WLAN  | 8.79     | ±9.6                   |
| 10600 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS1, 90pc duty cycle)         | WLAN  | 8.88     | ±9.6                   |
| 10601 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS2, 90pc duty cycle)         | WLAN  | 8.82     | ±9.6                   |
| 10602 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS3, 90pc duty cycle)         | WLAN  | 8.94     | ±9.6                   |
| 10603 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS4, 90pc duty cycle)         | WLAN  | 9.03     | ±9.6                   |
| 10604 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS5, 90pc duty cycle)         | WLAN  | 8.76     | ±9.6                   |
| 10605 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS6, 90pc duty cycle)         | WLAN  | 8.97     | ±9.6                   |
| 10606 | AAC | IEEE 802.11n (HT Mixed, 40 MHz, MCS7, 90pc duty cycle)         | WLAN  | 8.82     | ±9.6                   |
| 10607 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS0, 90pc duty cycle)             | WLAN  | 8.64     | ±9.6                   |
| 10608 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS1, 90pc duty cycle)             | WLAN  | 8.77     | ±9.6                   |

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| UID   | Rev | Communication System Name                              | Group     | PAR (dB) | Unc <sup>B</sup> k = 2 |
|-------|-----|--------------------------------------------------------|-----------|----------|------------------------|
| 10609 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS2, 90pc duty cycle)     | WLAN      | 8.57     | ±9.6                   |
| 10610 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS3, 90pc duty cycle)     | WLAN      | 8.78     | ±9.6                   |
| 10611 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS4, 90pc duty cycle)     | WLAN      | 8.70     | ±9.6                   |
| 10612 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS5, 90pc duty cycle)     | WLAN      | 8.77     | ±9.6                   |
| 10613 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS6, 90pc duty cycle)     | WLAN      | 8.94     | ±9.6                   |
| 10614 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS7, 90pc duty cycle)     | WLAN      | 8.59     | ±9.6                   |
| 10615 | AAC | IEEE 802.11ac WiFi (20 MHz, MCS8, 90pc duty cycle)     | WLAN      | 8.82     | ±9.6                   |
| 10616 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS0, 90pc duty cycle)     | WLAN      | 8.82     | ±9.6                   |
| 10617 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS1, 90pc duty cycle)     | WLAN      | 8.81     | ±9.6                   |
| 10618 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS2, 90pc duty cycle)     | WLAN      | 8.98     | ±9.6                   |
| 10619 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS3, 90pc duty cycle)     | WLAN      | 8.98     | ±9.6                   |
| 10620 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS4, 90pc duty cycle)     | WLAN      | 8.87     | ±9.6                   |
| 10621 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS5, 90pc duty cycle)     | WLAN      | 8.77     | ±9.6                   |
| 10622 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS6, 90pc duty cycle)     | WLAN      | 8.88     | ±9.6                   |
| 10623 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS7, 90pc duty cycle)     | WLAN      | 8.82     | ±9.6                   |
| 10624 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS8, 90pc duty cycle)     | WLAN      | 8.98     | ±9.6                   |
| 10625 | AAC | IEEE 802.11ac WiFi (40 MHz, MCS9, 90pc duty cycle)     | WLAN      | 8.96     | ±9.6                   |
| 10626 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS0, 90pc duty cycle)     | WLAN      | 8.83     | ±9.6                   |
| 10627 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS1, 90pc duty cycle)     | WLAN      | 8.88     | ±9.6                   |
| 10628 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS2, 90pc duty cycle)     | WLAN      | 8.71     | ±9.6                   |
| 10629 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS3, 90pc duty cycle)     | WLAN      | 8.85     | ±9.6                   |
| 10630 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS4, 90pc duty cycle)     | WLAN      | 8.72     | ±9.6                   |
| 10631 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS5, 90pc duty cycle)     | WLAN      | 8.81     | ±9.6                   |
| 10632 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS6, 90pc duty cycle)     | WLAN      | 8.74     | ±9.6                   |
| 10633 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS7, 90pc duty cycle)     | WLAN      | 8.83     | ±9.6                   |
| 10634 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS8, 90pc duty cycle)     | WLAN      | 8.80     | ±9.6                   |
| 10635 | AAC | IEEE 802.11ac WiFi (80 MHz, MCS9, 90pc duty cycle)     | WLAN      | 8.81     | ±9.6                   |
| 10636 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS0, 90pc duty cycle)    | WLAN      | 8.83     | ±9.6                   |
| 10637 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS1, 90pc duty cycle)    | WLAN      | 8.79     | ±9.6                   |
| 10638 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS2, 90pc duty cycle)    | WLAN      | 8.86     | ±9.6                   |
| 10639 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS3, 90pc duty cycle)    | WLAN      | 8.85     | ±9.6                   |
| 10640 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS4, 90pc duty cycle)    | WLAN      | 8.98     | ±9.6                   |
| 10641 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS5, 90pc duty cycle)    | WLAN      | 9.06     | ±9.6                   |
| 10642 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS6, 90pc duty cycle)    | WLAN      | 9.06     | ±9.6                   |
| 10643 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS7, 90pc duty cycle)    | WLAN      | 8.89     | ±9.6                   |
| 10644 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS8, 90pc duty cycle)    | WLAN      | 9.05     | ±9.6                   |
| 10645 | AAD | IEEE 802.11ac WiFi (160 MHz, MCS9, 90pc duty cycle)    | WLAN      | 9.11     | ±9.6                   |
| 10646 | AAH | LTE-TDD (SC-FDMA, 1 RB, 5 MHz, QPSK, UL Subframe=2,7)  | LTE-TDD   | 11.98    | ±9.6                   |
| 10647 | AAG | LTE-TDD (SC-FDMA, 1 RB, 20 MHz, QPSK, UL Subframe=2,7) | LTE-TDD   | 11.98    | ±9.6                   |
| 10648 | AAA | CDMA2000 (1x Advanced)                                 | CDMA2000  | 3.45     | ±9.6                   |
| 10652 | AAF | LTE-TDD (OFDMA, 5 MHz, E-TM 3.1, Clipping 44%)         | LTE-TDD   | 6.91     | ±9.6                   |
| 10653 | AAF | LTE-TDD (OFDMA, 10 MHz, E-TM 3.1, Clipping 44%)        | LTE-TDD   | 7.42     | ±9.6                   |
| 10654 | AAE | LTE-TDD (OFDMA, 15 MHz, E-TM 3.1, Clipping 44%)        | LTE-TDD   | 6.96     | ±9.6                   |
| 10655 | AAF | LTE-TDD (OFDMA, 20 MHz, E-TM 3.1, Clipping 44%)        | LTE-TDD   | 7.21     | ±9.6                   |
| 10658 | AAB | Pulse Waveform (200Hz, 10%)                            | Test      | 10.00    | ±9.6                   |
| 10659 | AAB | Pulse Waveform (200Hz, 20%)                            | Test      | 6.99     | ±9.6                   |
| 10660 | AAB | Pulse Waveform (200Hz, 40%)                            | Test      | 3.96     | ±9.6                   |
| 10661 | AAB | Pulse Waveform (200Hz, 60%)                            | Test      | 2.22     | ±9.6                   |
| 10662 | AAB | Pulse Waveform (200Hz, 80%)                            | Test      | 0.97     | ±9.6                   |
| 10670 | AAA | Bluetooth Low Energy                                   | Bluetooth | 2.19     | ±9.6                   |
| 10671 | AAC | IEEE 802.11ax (20 MHz, MCS0, 90pc duty cycle)          | WLAN      | 9.09     | ±9.6                   |
| 10672 | AAC | IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle)          | WLAN      | 8.57     | ±9.6                   |
| 10673 | AAC | IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle)          | WLAN      | 8.78     | ±9.6                   |
| 10674 | AAC | IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle)          | WLAN      | 8.74     | ±9.6                   |
| 10675 | AAC | IEEE 802.11ax (20 MHz, MCS4, 90pc duty cycle)          | WLAN      | 8.90     | ±9.6                   |
| 10676 | AAC | IEEE 802.11ax (20 MHz, MCS5, 90pc duty cycle)          | WLAN      | 8.77     | ±9.6                   |
| 10677 | AAC | IEEE 802.11ax (20 MHz, MCS6, 90pc duty cycle)          | WLAN      | 8.73     | ±9.6                   |
| 10678 | AAC | IEEE 802.11ax (20 MHz, MCS7, 90pc duty cycle)          | WLAN      | 8.78     | ±9.6                   |
| 10679 | AAC | IEEE 802.11ax (20 MHz, MCS8, 90pc duty cycle)          | WLAN      | 8.89     | ±9.6                   |
| 10680 | AAC | IEEE 802.11ax (20 MHz, MCS9, 90pc duty cycle)          | WLAN      | 8.80     | ±9.6                   |
| 10681 | AAC | IEEE 802.11ax (20 MHz, MCS10, 90pc duty cycle)         | WLAN      | 8.62     | ±9.6                   |
| 10682 | AAC | IEEE 802.11ax (20 MHz, MCS11, 90pc duty cycle)         | WLAN      | 8.83     | ±9.6                   |
| 10683 | AAC | IEEE 802.11ax (20 MHz, MCS0, 90pc duty cycle)          | WLAN      | 8.42     | ±9.6                   |
| 10684 | AAC | IEEE 802.11ax (20 MHz, MCS1, 90pc duty cycle)          | WLAN      | 8.26     | ±9.6                   |
| 10685 | AAC | IEEE 802.11ax (20 MHz, MCS2, 90pc duty cycle)          | WLAN      | 8.33     | ±9.6                   |
| 10686 | AAC | IEEE 802.11ax (20 MHz, MCS3, 90pc duty cycle)          | WLAN      | 8.28     | ±9.6                   |

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| UID   | Rev | Communication System Name                      | Group | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|------------------------------------------------|-------|----------|------------------------|
| 10687 | AAC | IEEE 802.11ax (20 MHz, MCS4, 99pc duty cycle)  | WLAN  | 8.45     | ±9.6                   |
| 10688 | AAC | IEEE 802.11ax (20 MHz, MCS5, 99pc duty cycle)  | WLAN  | 8.29     | ±9.6                   |
| 10689 | AAC | IEEE 802.11ax (20 MHz, MCS6, 99pc duty cycle)  | WLAN  | 8.55     | ±9.6                   |
| 10690 | AAC | IEEE 802.11ax (20 MHz, MCS7, 99pc duty cycle)  | WLAN  | 8.29     | ±9.6                   |
| 10691 | AAC | IEEE 802.11ax (20 MHz, MCS8, 99pc duty cycle)  | WLAN  | 8.25     | ±9.6                   |
| 10692 | AAC | IEEE 802.11ax (20 MHz, MCS9, 99pc duty cycle)  | WLAN  | 8.29     | ±9.6                   |
| 10693 | AAC | IEEE 802.11ax (20 MHz, MCS10, 99pc duty cycle) | WLAN  | 8.25     | ±9.6                   |
| 10694 | AAC | IEEE 802.11ax (20 MHz, MCS11, 99pc duty cycle) | WLAN  | 8.57     | ±9.6                   |
| 10695 | AAC | IEEE 802.11ax (40 MHz, MCS0, 90pc duty cycle)  | WLAN  | 8.78     | ±9.6                   |
| 10696 | AAC | IEEE 802.11ax (40 MHz, MCS1, 90pc duty cycle)  | WLAN  | 8.91     | ±9.6                   |
| 10697 | AAC | IEEE 802.11ax (40 MHz, MCS2, 90pc duty cycle)  | WLAN  | 8.61     | ±9.6                   |
| 10698 | AAC | IEEE 802.11ax (40 MHz, MCS3, 90pc duty cycle)  | WLAN  | 8.89     | ±9.6                   |
| 10699 | AAC | IEEE 802.11ax (40 MHz, MCS4, 90pc duty cycle)  | WLAN  | 8.80     | ±9.6                   |
| 10700 | AAC | IEEE 802.11ax (40 MHz, MCS5, 90pc duty cycle)  | WLAN  | 8.73     | ±9.6                   |
| 10701 | AAC | IEEE 802.11ax (40 MHz, MCS6, 90pc duty cycle)  | WLAN  | 8.66     | ±9.6                   |
| 10702 | AAC | IEEE 802.11ax (40 MHz, MCS7, 90pc duty cycle)  | WLAN  | 8.70     | ±9.6                   |
| 10703 | AAC | IEEE 802.11ax (40 MHz, MCS8, 90pc duty cycle)  | WLAN  | 8.82     | ±9.6                   |
| 10704 | AAC | IEEE 802.11ax (40 MHz, MCS9, 90pc duty cycle)  | WLAN  | 8.56     | ±9.6                   |
| 10705 | AAC | IEEE 802.11ax (40 MHz, MCS10, 90pc duty cycle) | WLAN  | 8.69     | ±9.6                   |
| 10706 | AAC | IEEE 802.11ax (40 MHz, MCS11, 90pc duty cycle) | WLAN  | 8.66     | ±9.6                   |
| 10707 | AAC | IEEE 802.11ax (40 MHz, MCS0, 99pc duty cycle)  | WLAN  | 8.32     | ±9.6                   |
| 10708 | AAC | IEEE 802.11ax (40 MHz, MCS1, 99pc duty cycle)  | WLAN  | 8.55     | ±9.6                   |
| 10709 | AAC | IEEE 802.11ax (40 MHz, MCS2, 99pc duty cycle)  | WLAN  | 8.33     | ±9.6                   |
| 10710 | AAC | IEEE 802.11ax (40 MHz, MCS3, 99pc duty cycle)  | WLAN  | 8.29     | ±9.6                   |
| 10711 | AAC | IEEE 802.11ax (40 MHz, MCS4, 99pc duty cycle)  | WLAN  | 8.39     | ±9.6                   |
| 10712 | AAC | IEEE 802.11ax (40 MHz, MCS5, 99pc duty cycle)  | WLAN  | 8.67     | ±9.6                   |
| 10713 | AAC | IEEE 802.11ax (40 MHz, MCS6, 99pc duty cycle)  | WLAN  | 8.33     | ±9.6                   |
| 10714 | AAC | IEEE 802.11ax (40 MHz, MCS7, 99pc duty cycle)  | WLAN  | 8.26     | ±9.6                   |
| 10715 | AAC | IEEE 802.11ax (40 MHz, MCS8, 99pc duty cycle)  | WLAN  | 8.45     | ±9.6                   |
| 10716 | AAC | IEEE 802.11ax (40 MHz, MCS9, 99pc duty cycle)  | WLAN  | 8.30     | ±9.6                   |
| 10717 | AAC | IEEE 802.11ax (40 MHz, MCS10, 99pc duty cycle) | WLAN  | 8.48     | ±9.6                   |
| 10718 | AAC | IEEE 802.11ax (40 MHz, MCS11, 99pc duty cycle) | WLAN  | 8.24     | ±9.6                   |
| 10719 | AAC | IEEE 802.11ax (80 MHz, MCS0, 90pc duty cycle)  | WLAN  | 8.81     | ±9.6                   |
| 10720 | AAC | IEEE 802.11ax (80 MHz, MCS1, 90pc duty cycle)  | WLAN  | 8.87     | ±9.6                   |
| 10721 | AAC | IEEE 802.11ax (80 MHz, MCS2, 90pc duty cycle)  | WLAN  | 8.76     | ±9.6                   |
| 10722 | AAC | IEEE 802.11ax (80 MHz, MCS3, 90pc duty cycle)  | WLAN  | 8.55     | ±9.6                   |
| 10723 | AAC | IEEE 802.11ax (80 MHz, MCS4, 90pc duty cycle)  | WLAN  | 8.70     | ±9.6                   |
| 10724 | AAC | IEEE 802.11ax (80 MHz, MCS5, 90pc duty cycle)  | WLAN  | 8.90     | ±9.6                   |
| 10725 | AAC | IEEE 802.11ax (80 MHz, MCS6, 90pc duty cycle)  | WLAN  | 8.74     | ±9.6                   |
| 10726 | AAC | IEEE 802.11ax (80 MHz, MCS7, 90pc duty cycle)  | WLAN  | 8.72     | ±9.6                   |
| 10727 | AAC | IEEE 802.11ax (80 MHz, MCS8, 90pc duty cycle)  | WLAN  | 8.66     | ±9.6                   |
| 10728 | AAC | IEEE 802.11ax (80 MHz, MCS9, 90pc duty cycle)  | WLAN  | 8.85     | ±9.6                   |
| 10729 | AAC | IEEE 802.11ax (80 MHz, MCS10, 90pc duty cycle) | WLAN  | 8.64     | ±9.6                   |
| 10730 | AAC | IEEE 802.11ax (80 MHz, MCS11, 90pc duty cycle) | WLAN  | 8.67     | ±9.6                   |
| 10731 | AAC | IEEE 802.11ax (80 MHz, MCS0, 99pc duty cycle)  | WLAN  | 8.42     | ±9.6                   |
| 10732 | AAC | IEEE 802.11ax (80 MHz, MCS1, 99pc duty cycle)  | WLAN  | 8.46     | ±9.6                   |
| 10733 | AAC | IEEE 802.11ax (80 MHz, MCS2, 99pc duty cycle)  | WLAN  | 8.40     | ±9.6                   |
| 10734 | AAC | IEEE 802.11ax (80 MHz, MCS3, 99pc duty cycle)  | WLAN  | 8.25     | ±9.6                   |
| 10735 | AAC | IEEE 802.11ax (80 MHz, MCS4, 99pc duty cycle)  | WLAN  | 8.33     | ±9.6                   |
| 10736 | AAC | IEEE 802.11ax (80 MHz, MCS5, 99pc duty cycle)  | WLAN  | 8.27     | ±9.6                   |
| 10737 | AAC | IEEE 802.11ax (80 MHz, MCS6, 99pc duty cycle)  | WLAN  | 8.36     | ±9.6                   |
| 10738 | AAC | IEEE 802.11ax (80 MHz, MCS7, 99pc duty cycle)  | WLAN  | 8.42     | ±9.6                   |
| 10739 | AAC | IEEE 802.11ax (80 MHz, MCS8, 99pc duty cycle)  | WLAN  | 8.29     | ±9.6                   |
| 10740 | AAC | IEEE 802.11ax (80 MHz, MCS9, 99pc duty cycle)  | WLAN  | 8.48     | ±9.6                   |
| 10741 | AAC | IEEE 802.11ax (80 MHz, MCS10, 99pc duty cycle) | WLAN  | 8.40     | ±9.6                   |
| 10742 | AAC | IEEE 802.11ax (80 MHz, MCS11, 99pc duty cycle) | WLAN  | 9.43     | ±9.6                   |
| 10743 | AAC | IEEE 802.11ax (160 MHz, MCS0, 90pc duty cycle) | WLAN  | 8.94     | ±9.6                   |
| 10744 | AAC | IEEE 802.11ax (160 MHz, MCS1, 90pc duty cycle) | WLAN  | 9.16     | ±9.6                   |
| 10745 | AAC | IEEE 802.11ax (160 MHz, MCS2, 90pc duty cycle) | WLAN  | 8.93     | ±9.6                   |
| 10746 | AAC | IEEE 802.11ax (160 MHz, MCS3, 90pc duty cycle) | WLAN  | 9.11     | ±9.6                   |
| 10747 | AAC | IEEE 802.11ax (160 MHz, MCS4, 90pc duty cycle) | WLAN  | 9.04     | ±9.6                   |
| 10748 | AAC | IEEE 802.11ax (160 MHz, MCS5, 90pc duty cycle) | WLAN  | 8.93     | ±9.6                   |
| 10749 | AAC | IEEE 802.11ax (160 MHz, MCS6, 90pc duty cycle) | WLAN  | 8.90     | ±9.6                   |
| 10750 | AAC | IEEE 802.11ax (160 MHz, MCS7, 90pc duty cycle) | WLAN  | 8.79     | ±9.6                   |
| 10751 | AAC | IEEE 802.11ax (160 MHz, MCS8, 90pc duty cycle) | WLAN  | 8.82     | ±9.6                   |
| 10752 | AAC | IEEE 802.11ax (160 MHz, MCS9, 90pc duty cycle) | WLAN  | 8.81     | ±9.6                   |

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|-------|-----|------------------------------------------------|---------------|----------|------------------------|
| 10753 | AAC | IEEE 802.11ax (160MHz, MCS10, 90pc duty cycle) | WLAN          | 8.00     | ±9.6                   |
| 10754 | AAC | IEEE 802.11ax (160MHz, MCS11, 90pc duty cycle) | WLAN          | 8.04     | ±9.6                   |
| 10755 | AAC | IEEE 802.11ax (160MHz, MCS0, 99pc duty cycle)  | WLAN          | 8.64     | ±9.6                   |
| 10756 | AAC | IEEE 802.11ax (160MHz, MCS1, 99pc duty cycle)  | WLAN          | 8.77     | ±9.6                   |
| 10757 | AAC | IEEE 802.11ax (160MHz, MCS2, 99pc duty cycle)  | WLAN          | 8.77     | ±9.6                   |
| 10758 | AAC | IEEE 802.11ax (160MHz, MCS3, 99pc duty cycle)  | WLAN          | 8.69     | ±9.6                   |
| 10759 | AAC | IEEE 802.11ax (160MHz, MCS4, 99pc duty cycle)  | WLAN          | 8.58     | ±9.6                   |
| 10760 | AAC | IEEE 802.11ax (160MHz, MCS5, 99pc duty cycle)  | WLAN          | 8.49     | ±9.6                   |
| 10761 | AAC | IEEE 802.11ax (160MHz, MCS6, 99pc duty cycle)  | WLAN          | 8.58     | ±9.6                   |
| 10762 | AAC | IEEE 802.11ax (160MHz, MCS7, 99pc duty cycle)  | WLAN          | 8.49     | ±9.6                   |
| 10763 | AAC | IEEE 802.11ax (160MHz, MCS8, 99pc duty cycle)  | WLAN          | 8.53     | ±9.6                   |
| 10764 | AAC | IEEE 802.11ax (160MHz, MCS9, 99pc duty cycle)  | WLAN          | 8.54     | ±9.6                   |
| 10765 | AAC | IEEE 802.11ax (160MHz, MCS10, 99pc duty cycle) | WLAN          | 8.54     | ±9.6                   |
| 10766 | AAC | IEEE 802.11ax (160MHz, MCS11, 99pc duty cycle) | WLAN          | 8.51     | ±9.6                   |
| 10767 | AAE | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)     | 5G NR FR1 TDD | 7.89     | ±9.6                   |
| 10768 | AAD | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 8.01     | ±9.6                   |
| 10769 | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 8.01     | ±9.6                   |
| 10770 | AAD | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 8.02     | ±9.6                   |
| 10771 | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 8.02     | ±9.6                   |
| 10772 | AAD | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 8.23     | ±9.6                   |
| 10773 | AAD | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 8.03     | ±9.6                   |
| 10774 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)    | 5G NR FR1 TDD | 8.02     | ±9.6                   |
| 10775 | AAD | 5G NR (CP-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)   | 5G NR FR1 TDD | 8.31     | ±9.6                   |
| 10776 | AAD | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.30     | ±9.6                   |
| 10777 | AAC | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.30     | ±9.6                   |
| 10778 | AAD | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10779 | AAC | 5G NR (CP-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.42     | ±9.6                   |
| 10780 | AAD | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.38     | ±9.6                   |
| 10781 | AAD | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.38     | ±9.6                   |
| 10782 | AAD | 5G NR (CP-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.43     | ±9.6                   |
| 10783 | AAE | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)  | 5G NR FR1 TDD | 8.31     | ±9.6                   |
| 10784 | AAD | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.29     | ±9.6                   |
| 10785 | AAD | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.40     | ±9.6                   |
| 10786 | AAD | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.35     | ±9.6                   |
| 10787 | AAD | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.44     | ±9.6                   |
| 10788 | AAD | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.39     | ±9.6                   |
| 10789 | AAD | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.37     | ±9.6                   |
| 10790 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz) | 5G NR FR1 TDD | 8.39     | ±9.6                   |
| 10791 | AAE | 5G NR (CP-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 7.83     | ±9.6                   |
| 10792 | AAD | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 7.92     | ±9.6                   |
| 10793 | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 7.95     | ±9.6                   |
| 10794 | AAD | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 7.92     | ±9.6                   |
| 10795 | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 7.84     | ±9.6                   |
| 10796 | AAD | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 7.82     | ±9.6                   |
| 10797 | AAD | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 8.01     | ±9.6                   |
| 10798 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 7.89     | ±9.6                   |
| 10799 | AAD | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 7.93     | ±9.6                   |
| 10801 | AAD | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 7.89     | ±9.6                   |
| 10802 | AAD | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 7.87     | ±9.6                   |
| 10803 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 7.93     | ±9.6                   |
| 10805 | AAD | 5G NR (CP-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10806 | AAD | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.37     | ±9.6                   |
| 10808 | AAD | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10810 | AAD | 5G NR (CP-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10812 | AAD | 5G NR (CP-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.35     | ±9.6                   |
| 10817 | AAE | 5G NR (CP-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)  | 5G NR FR1 TDD | 8.35     | ±9.6                   |
| 10819 | AAD | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10819 | AAD | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.33     | ±9.6                   |
| 10820 | AAD | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.30     | ±9.6                   |
| 10821 | AAD | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10822 | AAD | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10823 | AAD | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.36     | ±9.6                   |
| 10824 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.39     | ±9.6                   |
| 10825 | AAD | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10827 | AAD | 5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.42     | ±9.6                   |
| 10828 | AAD | 5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 30 kHz) | 5G NR FR1 TDD | 8.43     | ±9.6                   |

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|-------|-----|------------------------------------------------------|---------------|----------|------------------------|
| 10829 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)      | 5G NR FR1 TDD | 8.40     | ±9.6                   |
| 10830 | AAD | 5G NR (CP-OFDM, 1 RB, 10 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.63     | ±9.6                   |
| 10831 | AAD | 5G NR (CP-OFDM, 1 RB, 15 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.73     | ±9.6                   |
| 10832 | AAD | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.74     | ±9.6                   |
| 10833 | AAD | 5G NR (CP-OFDM, 1 RB, 25 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.70     | ±9.6                   |
| 10834 | AAD | 5G NR (CP-OFDM, 1 RB, 30 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.75     | ±9.6                   |
| 10835 | AAD | 5G NR (CP-OFDM, 1 RB, 40 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.70     | ±9.6                   |
| 10836 | AAD | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.66     | ±9.6                   |
| 10837 | AAD | 5G NR (CP-OFDM, 1 RB, 60 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.68     | ±9.6                   |
| 10838 | AAD | 5G NR (CP-OFDM, 1 RB, 80 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.70     | ±9.6                   |
| 10840 | AAD | 5G NR (CP-OFDM, 1 RB, 90 MHz, QPSK, 60 kHz)          | 5G NR FR1 TDD | 7.67     | ±9.6                   |
| 10841 | AAD | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 60 kHz)         | 5G NR FR1 TDD | 7.71     | ±9.6                   |
| 10843 | AAD | 5G NR (CP-OFDM, 50% RB, 15 MHz, QPSK, 60 kHz)        | 5G NR FR1 TDD | 8.40     | ±9.6                   |
| 10844 | AAD | 5G NR (CP-OFDM, 50% RB, 20 MHz, QPSK, 60 kHz)        | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10846 | AAD | 5G NR (CP-OFDM, 50% RB, 30 MHz, QPSK, 60 kHz)        | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10854 | AAD | 5G NR (CP-OFDM, 100% RB, 10 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10855 | AAD | 5G NR (CP-OFDM, 100% RB, 15 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.36     | ±9.6                   |
| 10856 | AAD | 5G NR (CP-OFDM, 100% RB, 20 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.37     | ±9.6                   |
| 10857 | AAD | 5G NR (CP-OFDM, 100% RB, 25 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.35     | ±9.6                   |
| 10858 | AAD | 5G NR (CP-OFDM, 100% RB, 30 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.36     | ±9.6                   |
| 10859 | AAD | 5G NR (CP-OFDM, 100% RB, 40 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.34     | ±9.6                   |
| 10860 | AAD | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10861 | AAD | 5G NR (CP-OFDM, 100% RB, 60 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.40     | ±9.6                   |
| 10863 | AAD | 5G NR (CP-OFDM, 100% RB, 80 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10864 | AAD | 5G NR (CP-OFDM, 100% RB, 90 MHz, QPSK, 60 kHz)       | 5G NR FR1 TDD | 8.37     | ±9.6                   |
| 10865 | AAD | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 60 kHz)      | 5G NR FR1 TDD | 8.41     | ±9.6                   |
| 10866 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)      | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10868 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.69     | ±9.6                   |
| 10869 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)     | 5G NR FR2 TDD | 5.75     | ±9.6                   |
| 10870 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)  | 5G NR FR2 TDD | 5.66     | ±9.6                   |
| 10871 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)    | 5G NR FR2 TDD | 5.75     | ±9.6                   |
| 10872 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz) | 5G NR FR2 TDD | 6.52     | ±9.6                   |
| 10873 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)    | 5G NR FR2 TDD | 6.61     | ±9.6                   |
| 10874 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz) | 5G NR FR2 TDD | 6.65     | ±9.6                   |
| 10875 | AAE | 5G NR (CP-OFDM, 1 RB, 100 MHz, QPSK, 120 kHz)        | 5G NR FR2 TDD | 7.78     | ±9.6                   |
| 10876 | AAE | 5G NR (CP-OFDM, 100% RB, 100 MHz, QPSK, 120 kHz)     | 5G NR FR2 TDD | 8.39     | ±9.6                   |
| 10877 | AAE | 5G NR (CP-OFDM, 1 RB, 100 MHz, 16QAM, 120 kHz)       | 5G NR FR2 TDD | 7.95     | ±9.6                   |
| 10878 | AAE | 5G NR (CP-OFDM, 100% RB, 100 MHz, 16QAM, 120 kHz)    | 5G NR FR2 TDD | 8.41     | ±9.6                   |
| 10879 | AAE | 5G NR (CP-OFDM, 1 RB, 100 MHz, 64QAM, 120 kHz)       | 5G NR FR2 TDD | 8.12     | ±9.6                   |
| 10880 | AAE | 5G NR (CP-OFDM, 100% RB, 100 MHz, 64QAM, 120 kHz)    | 5G NR FR2 TDD | 8.36     | ±9.6                   |
| 10881 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)      | 5G NR FR2 TDD | 5.75     | ±9.6                   |
| 10882 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)   | 5G NR FR2 TDD | 5.66     | ±9.6                   |
| 10883 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)     | 5G NR FR2 TDD | 6.57     | ±9.6                   |
| 10884 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)  | 5G NR FR2 TDD | 6.53     | ±9.6                   |
| 10885 | AAE | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)     | 5G NR FR2 TDD | 6.61     | ±9.6                   |
| 10886 | AAE | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)  | 5G NR FR2 TDD | 6.65     | ±9.6                   |
| 10887 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, QPSK, 120 kHz)         | 5G NR FR2 TDD | 7.78     | ±9.6                   |
| 10888 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, QPSK, 120 kHz)      | 5G NR FR2 TDD | 8.35     | ±9.6                   |
| 10889 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, 16QAM, 120 kHz)        | 5G NR FR2 TDD | 8.02     | ±9.6                   |
| 10890 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, 16QAM, 120 kHz)     | 5G NR FR2 TDD | 8.40     | ±9.6                   |
| 10891 | AAE | 5G NR (CP-OFDM, 1 RB, 50 MHz, 64QAM, 120 kHz)        | 5G NR FR2 TDD | 8.13     | ±9.6                   |
| 10892 | AAE | 5G NR (CP-OFDM, 100% RB, 50 MHz, 64QAM, 120 kHz)     | 5G NR FR2 TDD | 8.41     | ±9.6                   |
| 10897 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 30 kHz)        | 5G NR FR1 TDD | 5.66     | ±9.6                   |
| 10898 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.67     | ±9.6                   |
| 10899 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.67     | ±9.6                   |
| 10900 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10901 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10902 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10903 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10904 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10905 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 60 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10906 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 80 MHz, QPSK, 30 kHz)       | 5G NR FR1 TDD | 5.68     | ±9.6                   |
| 10907 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 30 kHz)      | 5G NR FR1 TDD | 5.78     | ±9.6                   |
| 10908 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 5.93     | ±9.6                   |
| 10909 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 5.96     | ±9.6                   |
| 10910 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 5.83     | ±9.6                   |

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| UID   | Rev | Communication System Name                           | Group         | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|-----------------------------------------------------|---------------|----------|------------------------|
| 10911 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.93     | ±9.6                   |
| 10912 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10913 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10914 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.85     | ±9.6                   |
| 10915 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 60 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.83     | ±9.6                   |
| 10916 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 80 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.87     | ±9.6                   |
| 10917 | AAB | 5G NR (DFT-s-OFDM, 50% RB, 100 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.94     | ±9.6                   |
| 10918 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 30 kHz)    | 5G NR FR1 TDD | 5.86     | ±9.6                   |
| 10919 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.86     | ±9.6                   |
| 10920 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.87     | ±9.6                   |
| 10921 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10922 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.82     | ±9.6                   |
| 10923 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10924 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10925 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.95     | ±9.6                   |
| 10926 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 60 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.84     | ±9.6                   |
| 10927 | AAB | 5G NR (DFT-s-OFDM, 100% RB, 80 MHz, QPSK, 30 kHz)   | 5G NR FR1 TDD | 5.94     | ±9.6                   |
| 10928 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 5 MHz, QPSK, 15 kHz)       | 5G NR FR1 FDD | 5.52     | ±9.6                   |
| 10929 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 10 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.52     | ±9.6                   |
| 10930 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 15 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.52     | ±9.6                   |
| 10931 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10932 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 25 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10933 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 30 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10934 | AAC | 5G NR (DFT-s-OFDM, 1 RB, 40 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10935 | AAD | 5G NR (DFT-s-OFDM, 1 RB, 50 MHz, QPSK, 15 kHz)      | 5G NR FR1 FDD | 5.51     | ±9.6                   |
| 10936 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 5 MHz, QPSK, 15 kHz)     | 5G NR FR1 FDD | 5.90     | ±9.6                   |
| 10937 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 10 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.77     | ±9.6                   |
| 10938 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 15 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.80     | ±9.6                   |
| 10939 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 20 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.82     | ±9.6                   |
| 10940 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 25 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.89     | ±9.6                   |
| 10941 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 30 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.83     | ±9.6                   |
| 10942 | AAC | 5G NR (DFT-s-OFDM, 50% RB, 40 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.85     | ±9.6                   |
| 10943 | AAD | 5G NR (DFT-s-OFDM, 50% RB, 50 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.95     | ±9.6                   |
| 10944 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 5 MHz, QPSK, 15 kHz)    | 5G NR FR1 FDD | 5.81     | ±9.6                   |
| 10945 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 10 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.85     | ±9.6                   |
| 10946 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 15 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.83     | ±9.6                   |
| 10947 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 20 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.87     | ±9.6                   |
| 10948 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 25 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.94     | ±9.6                   |
| 10949 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 30 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.87     | ±9.6                   |
| 10950 | AAC | 5G NR (DFT-s-OFDM, 100% RB, 40 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.94     | ±9.6                   |
| 10951 | AAD | 5G NR (DFT-s-OFDM, 100% RB, 50 MHz, QPSK, 15 kHz)   | 5G NR FR1 FDD | 5.92     | ±9.6                   |
| 10952 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   | 5G NR FR1 FDD | 8.25     | ±9.6                   |
| 10953 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 FDD | 8.15     | ±9.6                   |
| 10954 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 FDD | 8.23     | ±9.6                   |
| 10955 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 FDD | 8.42     | ±9.6                   |
| 10956 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   | 5G NR FR1 FDD | 8.14     | ±9.6                   |
| 10957 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 FDD | 8.31     | ±9.6                   |
| 10958 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 FDD | 8.61     | ±9.6                   |
| 10959 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 FDD | 8.33     | ±9.6                   |
| 10960 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 15 kHz)   | 5G NR FR1 TDD | 9.32     | ±9.6                   |
| 10961 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 TDD | 9.36     | ±9.6                   |
| 10962 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 TDD | 9.40     | ±9.6                   |
| 10963 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 15 kHz)  | 5G NR FR1 TDD | 9.55     | ±9.6                   |
| 10964 | AAC | 5G NR DL (CP-OFDM, TM 3.1, 5 MHz, 64-QAM, 30 kHz)   | 5G NR FR1 TDD | 9.29     | ±9.6                   |
| 10965 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 10 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 TDD | 9.37     | ±9.6                   |
| 10966 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 15 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 TDD | 9.55     | ±9.6                   |
| 10967 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 20 MHz, 64-QAM, 30 kHz)  | 5G NR FR1 TDD | 9.42     | ±9.6                   |
| 10968 | AAB | 5G NR DL (CP-OFDM, TM 3.1, 100 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.49     | ±9.6                   |
| 10972 | AAB | 5G NR (CP-OFDM, 1 RB, 20 MHz, QPSK, 15 kHz)         | 5G NR FR1 TDD | 11.59    | ±9.6                   |
| 10973 | AAB | 5G NR (DFT-s-OFDM, 1 RB, 100 MHz, QPSK, 30 kHz)     | 5G NR FR1 TDD | 9.06     | ±9.6                   |
| 10974 | AAB | 5G NR (CP-OFDM, 100% RB, 100 MHz, 256-QAM, 30 kHz)  | 5G NR FR1 TDD | 10.28    | ±9.6                   |
| 10978 | AAA | ULLA BDR                                            | ULLA          | 1.16     | ±9.6                   |
| 10979 | AAA | ULLA HDR4                                           | ULLA          | 8.58     | ±9.6                   |
| 10980 | AAA | ULLA HDR8                                           | ULLA          | 10.32    | ±9.6                   |
| 10981 | AAA | ULLA HDRp4                                          | ULLA          | 3.19     | ±9.6                   |
| 10982 | AAA | ULLA HDRp8                                          | ULLA          | 3.43     | ±9.6                   |

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| UID   | Rev | Communication System Name                          | Group         | PAR (dB) | Unc <sup>E</sup> k = 2 |
|-------|-----|----------------------------------------------------|---------------|----------|------------------------|
| 10983 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.31     | ±9.6                   |
| 10984 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 9.42     | ±9.6                   |
| 10985 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.54     | ±9.6                   |
| 10986 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.50     | ±9.6                   |
| 10987 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 60 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.53     | ±9.6                   |
| 10988 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 70 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.38     | ±9.6                   |
| 10989 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 80 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.33     | ±9.6                   |
| 10990 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 90 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 9.52     | ±9.6                   |
| 11003 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz) | 5G NR FR1 TDD | 10.24    | ±9.6                   |
| 11004 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz) | 5G NR FR1 TDD | 10.73    | ±9.6                   |
| 11005 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.70     | ±9.6                   |
| 11006 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.55     | ±9.6                   |
| 11007 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.46     | ±9.6                   |
| 11008 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 15 kHz) | 5G NR FR1 FDD | 8.51     | ±9.6                   |
| 11009 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 25 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.76     | ±9.6                   |
| 11010 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 30 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.85     | ±9.6                   |
| 11011 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 40 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.86     | ±9.6                   |
| 11012 | AAA | 5G NR DL (CP-OFDM, TM 3.1, 50 MHz, 64-QAM, 30 kHz) | 5G NR FR1 FDD | 8.68     | ±9.6                   |
| 11013 | AAA | IEEE 802.11be (320 MHz, MCS1, 99pc duty cycle)     | WLAN          | 8.47     | ±9.6                   |
| 11014 | AAA | IEEE 802.11be (320 MHz, MCS2, 99pc duty cycle)     | WLAN          | 8.45     | ±9.6                   |
| 11015 | AAA | IEEE 802.11be (320 MHz, MCS3, 99pc duty cycle)     | WLAN          | 8.44     | ±9.6                   |
| 11016 | AAA | IEEE 802.11be (320 MHz, MCS4, 99pc duty cycle)     | WLAN          | 8.44     | ±9.6                   |
| 11017 | AAA | IEEE 802.11be (320 MHz, MCS5, 99pc duty cycle)     | WLAN          | 8.41     | ±9.6                   |
| 11018 | AAA | IEEE 802.11be (320 MHz, MCS6, 99pc duty cycle)     | WLAN          | 8.40     | ±9.6                   |
| 11019 | AAA | IEEE 802.11be (320 MHz, MCS7, 99pc duty cycle)     | WLAN          | 8.29     | ±9.6                   |
| 11020 | AAA | IEEE 802.11be (320 MHz, MCS8, 99pc duty cycle)     | WLAN          | 8.27     | ±9.6                   |
| 11021 | AAA | IEEE 802.11be (320 MHz, MCS9, 99pc duty cycle)     | WLAN          | 8.40     | ±9.6                   |
| 11022 | AAA | IEEE 802.11be (320 MHz, MCS10, 99pc duty cycle)    | WLAN          | 8.36     | ±9.6                   |
| 11023 | AAA | IEEE 802.11be (320 MHz, MCS11, 99pc duty cycle)    | WLAN          | 8.09     | ±9.6                   |
| 11024 | AAA | IEEE 802.11be (320 MHz, MCS12, 99pc duty cycle)    | WLAN          | 8.42     | ±9.6                   |
| 11025 | AAA | IEEE 802.11be (320 MHz, MCS13, 99pc duty cycle)    | WLAN          | 8.37     | ±9.6                   |
| 11026 | AAA | IEEE 802.11be (320 MHz, MCS0, 99pc duty cycle)     | WLAN          | 8.39     | ±9.6                   |
| 11027 | AAA | Pulse Waveform (Square, 20 ms, 10 ms)              | MRI           | 3.01     | ±9.6                   |
| 11028 | AAA | Pulse Waveform (Square, 50 ms, 40 ms)              | MRI           | 0.97     | ±9.6                   |

<sup>E</sup> Uncertainty is determined using the max. deviation from linear response applying rectangular distribution and is expressed for the square of the field value.

## Appendix C

### Dipole Calibration Certificates

**Calibration Laboratory of**  
**Schmid & Partner**  
**Engineering AG**  
 Zeughausstrasse 43, 8004 Zurich, Switzerland



**S** Schweizerischer Kalibrierdienst  
**C** Service suisse d'étalonnage  
**S** Servizio svizzero di taratura  
**S** Swiss Calibration Service

Accreditation No.: **SCS 0108**

Accredited by the Swiss Accreditation Service (SAS)

The Swiss Accreditation Service is one of the signatories to the EA  
 Multilateral Agreement for the recognition of calibration certificates

Client **Motorola Solutions**  
**Bayan Lepas, Malaysia**

Certificate No. **D450V3-1054\_Jul24**

## CALIBRATION CERTIFICATE

Object **D450V3 - SN:1054**

Calibration procedure(s) **QA CAL-15.v11**  
**Calibration Procedure for SAR Validation Sources below 700 MHz**

Calibration date: **July 16, 2024**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility; environment temperature  $(22 \pm 3)^{\circ}\text{C}$  and humidity  $< 70\%$ .

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards               | ID #               | Cal Date (Certificate No.)        | Scheduled Calibration  |
|---------------------------------|--------------------|-----------------------------------|------------------------|
| Power meter NRP2                | SN: 104778         | 26-Mar-24 (No. 217-04036/04037)   | Mar-25                 |
| Power sensor NRP-Z91            | SN: 103244         | 26-Mar-24 (No. 217-04036)         | Mar-25                 |
| Power sensor NRP-Z91            | SN: 103245         | 26-Mar-24 (No. 217-04037)         | Mar-25                 |
| Reference 20 dB Attenuator      | SN: BH9394 (20k)   | 26-Mar-24 (No. 217-04046)         | Mar-25                 |
| Type-N mismatch combination     | SN: 310982 / 06327 | 26-Mar-24 (No. 217-04047)         | Mar-25                 |
| Reference Probe EX3DV4          | SN: 3877           | 10-Jan-24 (No. EX3-3877_Jan24)    | Jan-25                 |
| DAE4                            | SN: 654            | 15-Jan-24 (No. DAE4-654_Jan24)    | Jan-25                 |
| Secondary Standards             | ID #               | Check Date (in house)             | Scheduled Check        |
| Power meter NRP2                | SN: 107193         | 08-Nov-21 (in house check Dec-22) | In house check: Dec-24 |
| Power sensor NRP-Z91            | SN: 100922         | 15-Dec-09 (in house check Dec-22) | In house check: Dec-24 |
| Power sensor NRP-Z91            | SN: 100418         | 01-Jan-04 (in house check Dec-22) | In house check: Dec-24 |
| RF generator HP 8648C           | SN: US3642U01700   | 04-Aug-99 (in house check Jun-24) | In house check: Jun-26 |
| Network Analyzer Agilent E8358A | SN: US41080477     | 31-Mar-14 (in house check Oct-22) | In house check: Oct-24 |

|                |                          |                                   |               |
|----------------|--------------------------|-----------------------------------|---------------|
| Calibrated by: | Name<br>Krešimir Franjić | Function<br>Laboratory Technician | Signature<br> |
| Approved by:   | Sven Kühn                | Technical Manager                 |               |

Issued: July 16, 2024

This calibration certificate shall not be reproduced except in full without written approval of the laboratory.

Certificate No: D450V3-1054\_Jul24

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**Engineering AG**  
 Zeughausstrasse 43, 8004 Zurich, Switzerland



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**C** Service suisse d'étalonnage  
**S** Servizio svizzero di taratura  
**S** Swiss Calibration Service

Accredited by the Swiss Accreditation Service (SAS)  
 The Swiss Accreditation Service is one of the signatories to the EA  
 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

#### Glossary:

|       |                                 |
|-------|---------------------------------|
| TSL   | tissue simulating liquid        |
| ConvF | sensitivity in TSL / NORM x,y,z |
| N/A   | not applicable or not measured  |

#### Calibration is Performed According to the Following Standards:

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### Additional Documentation:

- DASY System Handbook

#### Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The source is mounted in a touch configuration below the center marking of the flat phantom.
- Return Loss:** This parameter is measured with the source positioned under the liquid filled phantom (as described in the measurement condition clause). The Return Loss ensures low reflected power. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k=2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%.

**Measurement Conditions**

DASY system configuration, as far as not given on page 1.

|                              |                        |                                 |
|------------------------------|------------------------|---------------------------------|
| DASY Version                 | DASY52                 | V52.10.4                        |
| Extrapolation                | Advanced Extrapolation |                                 |
| Phantom                      | ELI4 Flat Phantom      | Shell thickness: $2 \pm 0.2$ mm |
| Distance Dipole Center - TSL | 15 mm                  | with Spacer                     |
| Zoom Scan Resolution         | dx, dy, dz = 5 mm      |                                 |
| Frequency                    | 450 MHz $\pm$ 1 MHz    |                                 |

**Head TSL parameters**

The following parameters and calculations were applied.

|                                         | Temperature         | Permittivity   | Conductivity         |
|-----------------------------------------|---------------------|----------------|----------------------|
| Nominal Head TSL parameters             | 22.0 °C             | 43.5           | 0.87 mho/m           |
| Measured Head TSL parameters            | (22.0 $\pm$ 0.2) °C | 45.4 $\pm$ 6 % | 0.88 mho/m $\pm$ 6 % |
| Head TSL temperature change during test | < 0.5 °C            | ----           | ----                 |

**SAR result with Head TSL**

|                                                       |                    |                              |
|-------------------------------------------------------|--------------------|------------------------------|
| SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL | Condition          |                              |
| SAR measured                                          | 250 mW input power | 1.16 W/kg                    |
| SAR for nominal Head TSL parameters                   | normalized to 1W   | 4.64 W/kg $\pm$ 18.1 % (k=2) |

|                                                         |                    |                              |
|---------------------------------------------------------|--------------------|------------------------------|
| SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL | condition          |                              |
| SAR measured                                            | 250 mW input power | 0.773 W/kg                   |
| SAR for nominal Head TSL parameters                     | normalized to 1W   | 3.09 W/kg $\pm$ 17.6 % (k=2) |

**Body TSL parameters**

The following parameters and calculations were applied.

|                                         | Temperature         | Permittivity   | Conductivity         |
|-----------------------------------------|---------------------|----------------|----------------------|
| Nominal Body TSL parameters             | 22.0 °C             | 56.7           | 0.94 mho/m           |
| Measured Body TSL parameters            | (22.0 $\pm$ 0.2) °C | 56.5 $\pm$ 6 % | 0.95 mho/m $\pm$ 6 % |
| Body TSL temperature change during test | < 0.5 °C            | ----           | ----                 |

**SAR result with Body TSL**

|                                                       |                    |                              |
|-------------------------------------------------------|--------------------|------------------------------|
| SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL | Condition          |                              |
| SAR measured                                          | 250 mW input power | 1.19 W/kg                    |
| SAR for nominal Body TSL parameters                   | normalized to 1W   | 4.72 W/kg $\pm$ 18.1 % (k=2) |

|                                                         |                    |                              |
|---------------------------------------------------------|--------------------|------------------------------|
| SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL | condition          |                              |
| SAR measured                                            | 250 mW input power | 0.804 W/kg                   |
| SAR for nominal Body TSL parameters                     | normalized to 1W   | 3.19 W/kg $\pm$ 17.6 % (k=2) |

**Appendix (Additional assessments outside the scope of SCS 0108)****Antenna Parameters with Head TSL**

|                                      |                                |
|--------------------------------------|--------------------------------|
| Impedance, transformed to feed point | 58.1 $\Omega$ - 1.5 j $\Omega$ |
| Return Loss                          | - 22.3 dB                      |

**Antenna Parameters with Body TSL**

|                                      |                                |
|--------------------------------------|--------------------------------|
| Impedance, transformed to feed point | 55.6 $\Omega$ - 4.4 j $\Omega$ |
| Return Loss                          | - 23.4 dB                      |

**General Antenna Parameters and Design**

|                                  |          |
|----------------------------------|----------|
| Electrical Delay (one direction) | 1.351 ns |
|----------------------------------|----------|

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

**Additional EUT Data**

|                 |       |
|-----------------|-------|
| Manufactured by | SPEAG |
|-----------------|-------|

DASY5 Validation Report for Head TSL

Date: 15.07.2024

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 450 MHz; Type: D450V3; Serial: D450V3 - SN:1054

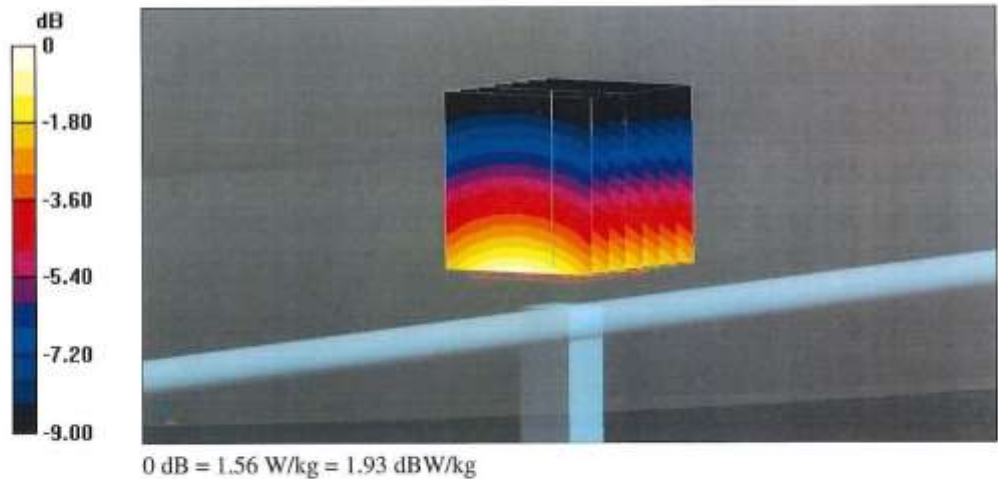
Communication System: UID 0 - CW; Frequency: 450 MHz  
Medium parameters used:  $f = 450 \text{ MHz}$ ;  $\sigma = 0.88 \text{ S/m}$ ;  $\epsilon_r = 45.4$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

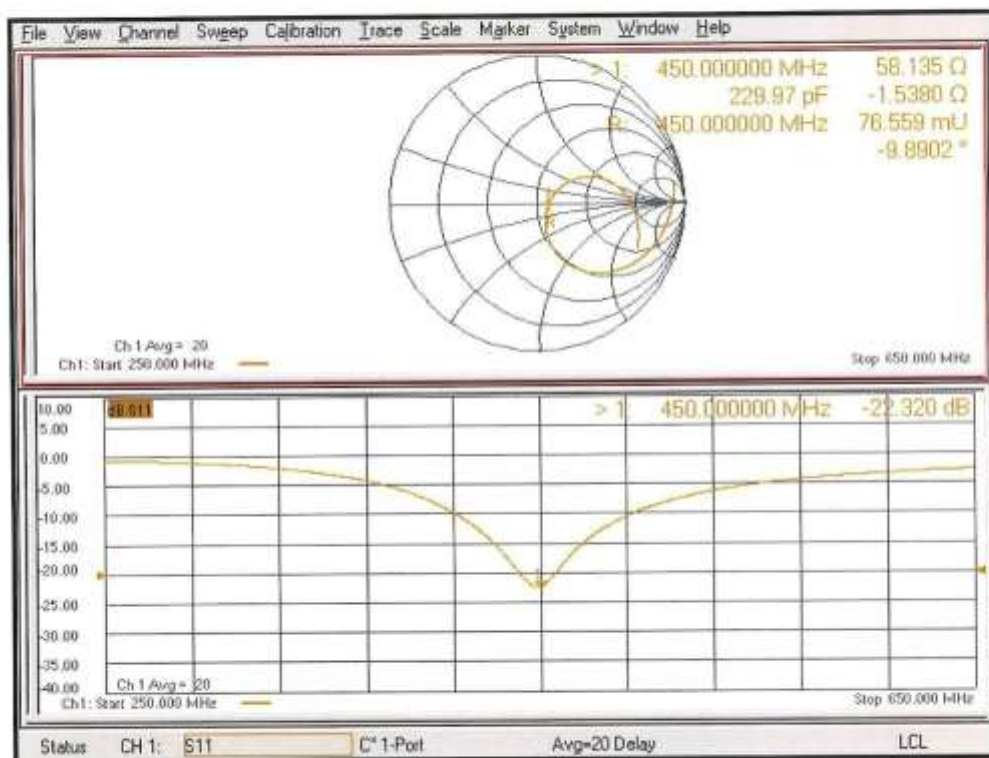
- Probe: EX3DV4 - SN3877; ConvF(10.64, 10.64, 10.64) @ 450 MHz; Calibrated: 10.01.2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn654; Calibrated: 15.01.2024
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2034
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Dipole Calibration for Head Tissue/ $d=15\text{mm}$ ,  $P_{in}=250\text{mW}$ /Zoom Scan (7x7x7)/Cube 0:

Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value =  $38.96 \text{ V/m}$ ; Power Drift =  $-0.01 \text{ dB}$   
Peak SAR (extrapolated) =  $1.80 \text{ W/kg}$   
**SAR(1 g) =  $1.16 \text{ W/kg}$ ; SAR(10 g) =  $0.773 \text{ W/kg}$**   
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid ( $> 15 \text{ mm}$ )  
Ratio of SAR at M2 to SAR at M1 =  $64.1\%$   
Maximum value of SAR (measured) =  $1.56 \text{ W/kg}$



## Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 16.07.2024

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 450 MHz; Type: D450V3; Serial: D450V3 - SN:1054

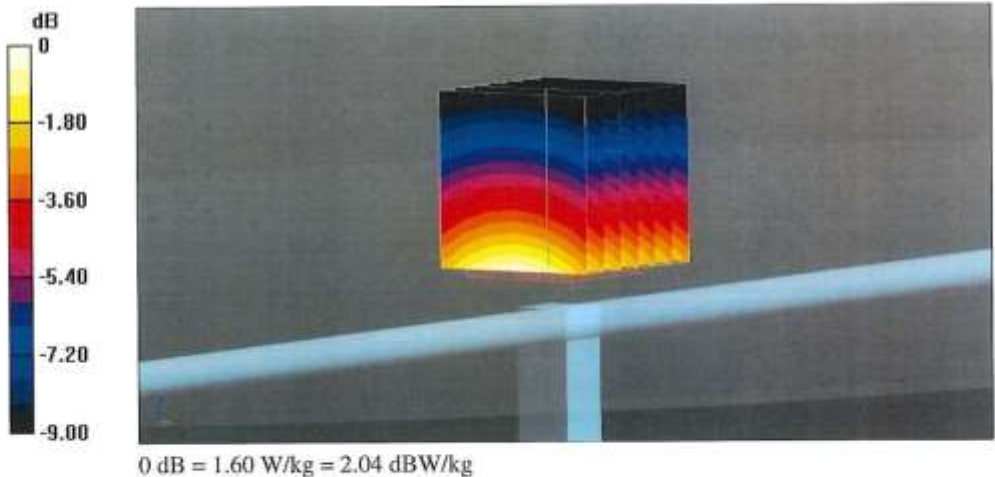
Communication System: UID 0 - CW; Frequency: 450 MHz  
Medium parameters used:  $f = 450\text{ MHz}$ ;  $\sigma = 0.95\text{ S/m}$ ;  $\epsilon_r = 56.5$ ;  $\rho = 1000\text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

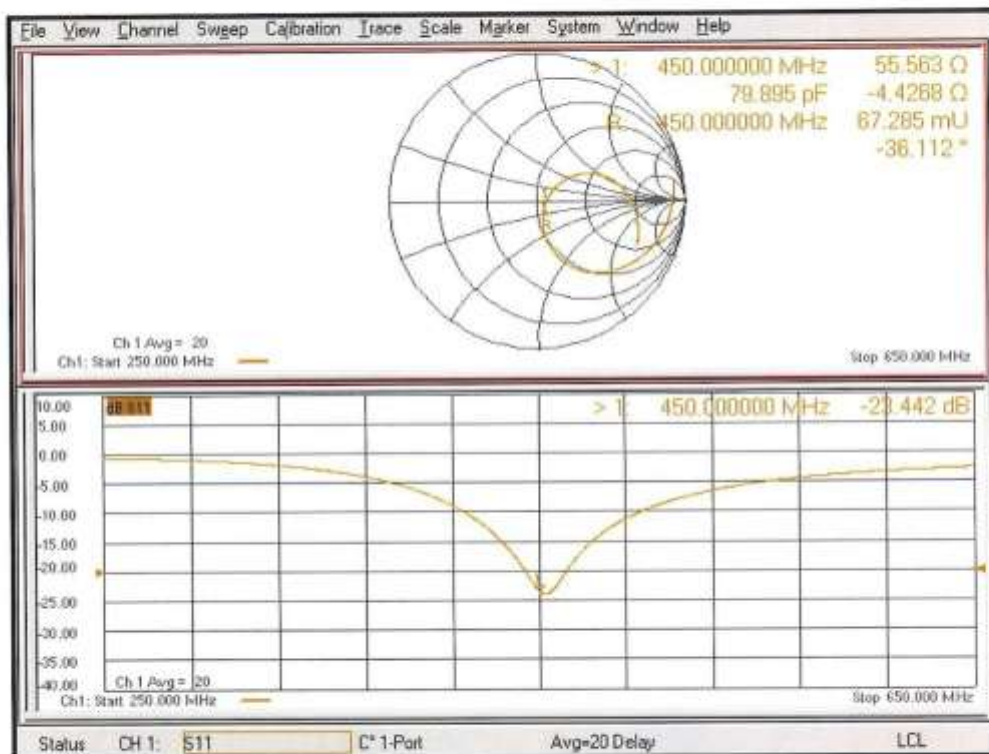
- Probe: EX3DV4 - SN3877; ConvF(10.64, 10.64, 10.64) @ 450 MHz; Calibrated: 10.01.2024
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn654; Calibrated: 15.01.2024
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2034
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Dipole Calibration for Body Tissue/d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:

Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 42.70 V/m; Power Drift = -0.06 dB  
Peak SAR (extrapolated) = 1.82 W/kg  
**SAR(1 g) = 1.19 W/kg; SAR(10 g) = 0.804 W/kg**  
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 15 mm)  
Ratio of SAR at M2 to SAR at M1 = 65.5%  
Maximum value of SAR (measured) = 1.60 W/kg



## Impedance Measurement Plot for Body TSL



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**Calibration Laboratory of**  
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 The Swiss Accreditation Service is one of the signatories to the EA  
 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

Client **Motorola Solutions**  
**Bayan Lepas, Malaysia**

Certificate No. **D450V3-1077\_Jan25**

## CALIBRATION CERTIFICATE

Object **D450V3 - SN:1077**

Calibration procedure(s) **QA CAL-15.v11**  
**Calibration Procedure for SAR Validation Sources below 700 MHz**

Calibration date: **January 30, 2025**

This calibration certificate documents the traceability to national standards, which realize the physical units of measurements (SI).  
 The measurements and the uncertainties with confidence probability are given on the following pages and are part of the certificate.

All calibrations have been conducted in the closed laboratory facility: environment temperature (22 ± 3)°C and humidity < 70%.

Calibration Equipment used (M&TE critical for calibration)

| Primary Standards               | ID #               | Cal Date (Certificate No.)        | Scheduled Calibration  |
|---------------------------------|--------------------|-----------------------------------|------------------------|
| Power meter NRP2                | SN: 104778         | 26-Mar-24 (No. 217-04036/04037)   | Mar-25                 |
| Power sensor NRP-Z91            | SN: 103244         | 26-Mar-24 (No. 217-04036)         | Mar-25                 |
| Power sensor NRP-Z91            | SN: 103245         | 26-Mar-24 (No. 217-04037)         | Mar-25                 |
| Reference 20 dB Attenuator      | SN: BH9394 (20k)   | 26-Mar-24 (No. 217-04046)         | Mar-25                 |
| Type-N mismatch combination     | SN: 310982 / 06327 | 26-Mar-24 (No. 217-04047)         | Mar-25                 |
| Reference Probe EX3DV4          | SN: 3877           | 06-Jan-25 (No. EX3-3877_Jan25)    | Jan-26                 |
| DAE4                            | SN: 654            | 18-Oct-24 (No. DAE4-654_Oct24)    | Oct-25                 |
| Secondary Standards             | ID #               | Check Date (in house)             | Scheduled Check        |
| Power meter NRP2                | SN: 107193         | 08-Nov-21 (in house check Jun-24) | In house check: Jun-26 |
| Power sensor NRP-Z91            | SN: 100922         | 15-Dec-09 (in house check Jun-24) | In house check: Jun-26 |
| Power sensor NRP-Z91            | SN: 100416         | 01-Jan-04 (in house check Jun-24) | In house check: Jun-26 |
| RF generator HP 6648C           | SN: US3642U01700   | 04-Aug-99 (in house check Jun-24) | In house check: Jun-26 |
| Network Analyzer Agilent E8358A | SN: US41080477     | 31-Mar-14 (in house check Sep-24) | In house check: Sep-26 |

|                |                        |                                   |               |
|----------------|------------------------|-----------------------------------|---------------|
| Calibrated by: | Name<br>Jeton Kastrati | Function<br>Laboratory Technician | Signature<br> |
| Approved by:   | Sven Kühn              | Technical Manager                 |               |

Issued: January 31, 2025

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Certificate No: D450V3-1077\_Jan25

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 The Swiss Accreditation Service is one of the signatories to the EA  
 Multilateral Agreement for the recognition of calibration certificates

Accreditation No.: **SCS 0108**

#### Glossary:

|       |                                 |
|-------|---------------------------------|
| TSL   | tissue simulating liquid        |
| ConvF | sensitivity in TSL / NORM x,y,z |
| N/A   | not applicable or not measured  |

#### Calibration is Performed According to the Following Standards:

- IEC/IEEE 62209-1528, "Measurement Procedure For The Assessment Of Specific Absorption Rate Of Human Exposure To Radio Frequency Fields From Hand-Held And Body-Worn Wireless Communication Devices - Part 1528: Human Models, Instrumentation And Procedures (Frequency Range of 4 MHz to 10 GHz)", October 2020.
- KDB 865664, "SAR Measurement Requirements for 100 MHz to 6 GHz"

#### Additional Documentation:

- DASY System Handbook

#### Methods Applied and Interpretation of Parameters:

- Measurement Conditions:** Further details are available from the Validation Report at the end of the certificate. All figures stated in the certificate are valid at the frequency indicated.
- Antenna Parameters with TSL:** The source is mounted in a touch configuration below the center marking of the flat phantom.
- Return Loss:** This parameter is measured with the source positioned under the liquid filled phantom (as described in the measurement condition clause). The Return Loss ensures low reflected power. No uncertainty required.
- SAR measured:** SAR measured at the stated antenna input power.
- SAR normalized:** SAR as measured, normalized to an input power of 1 W at the antenna connector.
- SAR for nominal TSL parameters:** The measured TSL parameters are used to calculate the nominal SAR result.

The reported uncertainty of measurement is stated as the standard uncertainty of measurement multiplied by the coverage factor  $k=2$ , which for a normal distribution corresponds to a coverage probability of approximately 95%.

**Measurement Conditions**

DASY system configuration, as far as not given on page 1.

|                              |                        |                                 |
|------------------------------|------------------------|---------------------------------|
| DASY Version                 | DASY52                 | V52.10.4                        |
| Extrapolation                | Advanced Extrapolation |                                 |
| Phantom                      | ELI4 Flat Phantom      | Shell thickness: $2 \pm 0.2$ mm |
| Distance Dipole Center - TSL | 15 mm                  | with Spacer                     |
| Zoom Scan Resolution         | dx, dy, dz = 5 mm      |                                 |
| Frequency                    | 450 MHz $\pm$ 1 MHz    |                                 |

**Head TSL parameters**

The following parameters and calculations were applied.

|                                         | Temperature         | Permittivity   | Conductivity         |
|-----------------------------------------|---------------------|----------------|----------------------|
| Nominal Head TSL parameters             | 22.0 °C             | 43.5           | 0.87 mho/m           |
| Measured Head TSL parameters            | (22.0 $\pm$ 0.2) °C | 42.4 $\pm$ 6 % | 0.87 mho/m $\pm$ 6 % |
| Head TSL temperature change during test | < 0.5 °C            | ----           | ----                 |

**SAR result with Head TSL**

|                                                       |                    |                              |
|-------------------------------------------------------|--------------------|------------------------------|
| SAR averaged over 1 cm <sup>3</sup> (1 g) of Head TSL | Condition          |                              |
| SAR measured                                          | 250 mW input power | 1.14 W/kg                    |
| SAR for nominal Head TSL parameters                   | normalized to 1W   | 4.53 W/kg $\pm$ 18.1 % (k=2) |

|                                                         |                    |                              |
|---------------------------------------------------------|--------------------|------------------------------|
| SAR averaged over 10 cm <sup>3</sup> (10 g) of Head TSL | condition          |                              |
| SAR measured                                            | 250 mW input power | 0.759 W/kg                   |
| SAR for nominal Head TSL parameters                     | normalized to 1W   | 3.02 W/kg $\pm$ 17.6 % (k=2) |

**Body TSL parameters**

The following parameters and calculations were applied.

|                                         | Temperature         | Permittivity   | Conductivity         |
|-----------------------------------------|---------------------|----------------|----------------------|
| Nominal Body TSL parameters             | 22.0 °C             | 56.7           | 0.94 mho/m           |
| Measured Body TSL parameters            | (22.0 $\pm$ 0.2) °C | 56.6 $\pm$ 6 % | 0.93 mho/m $\pm$ 6 % |
| Body TSL temperature change during test | < 0.5 °C            | ----           | ----                 |

**SAR result with Body TSL**

|                                                       |                    |                              |
|-------------------------------------------------------|--------------------|------------------------------|
| SAR averaged over 1 cm <sup>3</sup> (1 g) of Body TSL | Condition          |                              |
| SAR measured                                          | 250 mW input power | 1.18 W/kg                    |
| SAR for nominal Body TSL parameters                   | normalized to 1W   | 4.76 W/kg $\pm$ 18.1 % (k=2) |

|                                                         |                    |                              |
|---------------------------------------------------------|--------------------|------------------------------|
| SAR averaged over 10 cm <sup>3</sup> (10 g) of Body TSL | condition          |                              |
| SAR measured                                            | 250 mW input power | 0.799 W/kg                   |
| SAR for nominal Body TSL parameters                     | normalized to 1W   | 3.22 W/kg $\pm$ 17.6 % (k=2) |

**Appendix (Additional assessments outside the scope of SCS 0108)****Antenna Parameters with Head TSL**

|                                      |                                |
|--------------------------------------|--------------------------------|
| Impedance, transformed to feed point | 57.6 $\Omega$ - 2.9 j $\Omega$ |
| Return Loss                          | - 22.5 dB                      |

**Antenna Parameters with Body TSL**

|                                      |                                |
|--------------------------------------|--------------------------------|
| Impedance, transformed to feed point | 54.1 $\Omega$ - 7.9 j $\Omega$ |
| Return Loss                          | - 21.3 dB                      |

**General Antenna Parameters and Design**

|                                  |          |
|----------------------------------|----------|
| Electrical Delay (one direction) | 1.350 ns |
|----------------------------------|----------|

After long term use with 100W radiated power, only a slight warming of the dipole near the feedpoint can be measured.

The dipole is made of standard semirigid coaxial cable. The center conductor of the feeding line is directly connected to the second arm of the dipole. The antenna is therefore short-circuited for DC-signals. On some of the dipoles, small end caps are added to the dipole arms in order to improve matching when loaded according to the position as explained in the "Measurement Conditions" paragraph. The SAR data are not affected by this change. The overall dipole length is still according to the Standard.

No excessive force must be applied to the dipole arms, because they might bend or the soldered connections near the feedpoint may be damaged.

**Additional EUT Data**

|                 |       |
|-----------------|-------|
| Manufactured by | SPEAG |
|-----------------|-------|

DASY5 Validation Report for Head TSL

Date: 30.01.2025

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 450 MHz; Type: D450V3; Serial: D450V3 - SN:1077

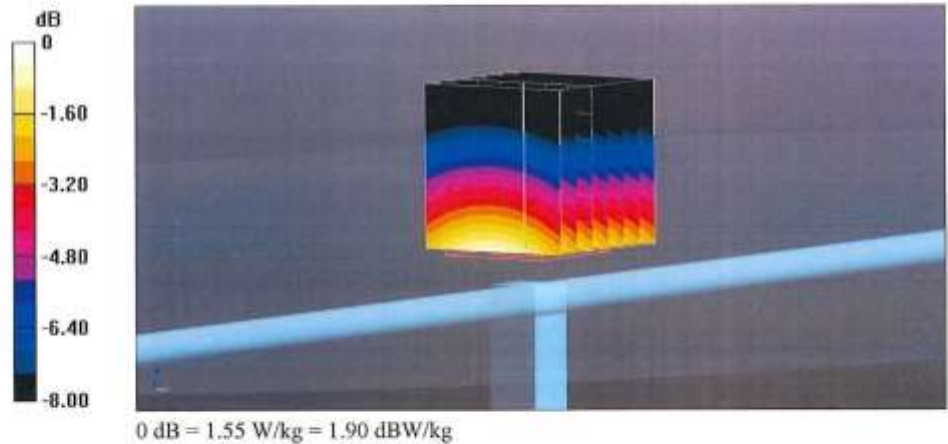
Communication System: UID 0 - CW; Frequency: 450 MHz  
Medium parameters used:  $f = 450\text{ MHz}$ ;  $\sigma = 0.87\text{ S/m}$ ;  $\epsilon_r = 42.4$ ;  $\rho = 1000\text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

DASY52 Configuration:

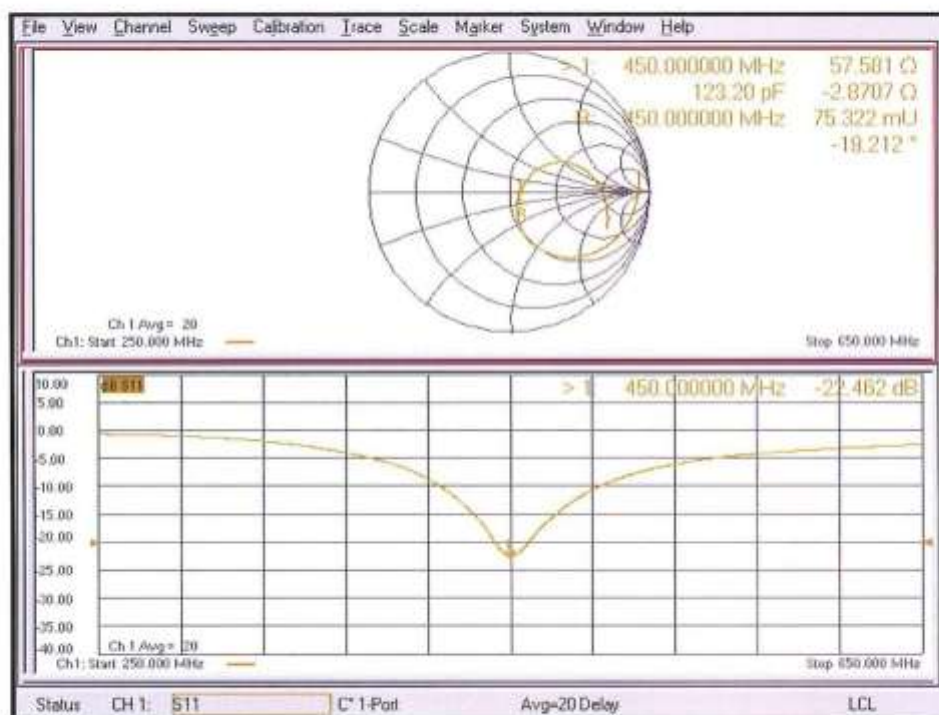
- Probe: EX3DV4 - SN3877; ConvF(10.79, 10.79, 10.79) @ 450 MHz; Calibrated: 06.01.2025
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn654; Calibrated: 18.10.2024
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2034
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Dipole Calibration for Head Tissue/d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:

Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 39.07 V/m; Power Drift = -0.00 dB  
Peak SAR (extrapolated) = 1.80 W/kg  
SAR(1 g) = 1.14 W/kg; SAR(10 g) = 0.759 W/kg  
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 15 mm)  
Ratio of SAR at M2 to SAR at M1 = 63.5%  
Maximum value of SAR (measured) = 1.55 W/kg



## Impedance Measurement Plot for Head TSL



DASY5 Validation Report for Body TSL

Date: 30.01.2025

Test Laboratory: SPEAG, Zurich, Switzerland

DUT: Dipole 450 MHz; Type: D450V3; Serial: D450V3 - SN:1077

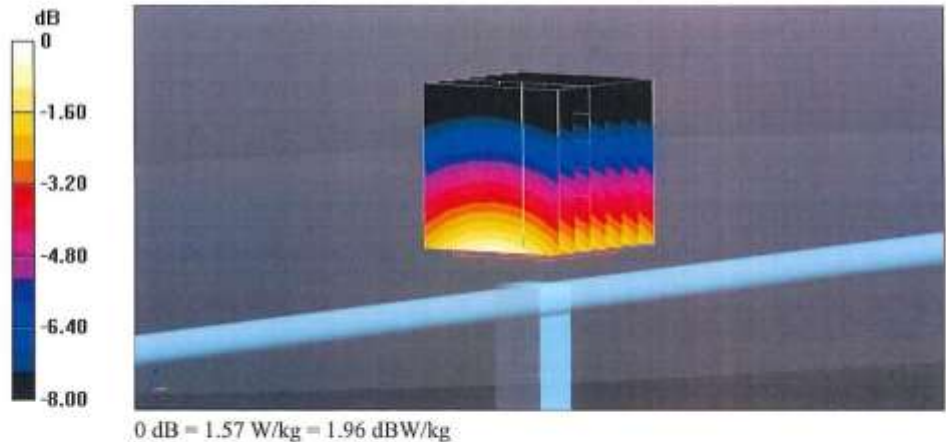
Communication System: UID 0 - CW; Frequency: 450 MHz  
Medium parameters used:  $f = 450 \text{ MHz}$ ;  $\sigma = 0.93 \text{ S/m}$ ;  $\epsilon_r = 56.6$ ;  $\rho = 1000 \text{ kg/m}^3$   
Phantom section: Flat Section  
Measurement Standard: DASY5 (IEEE/IEC/ANSI C63.19-2011)

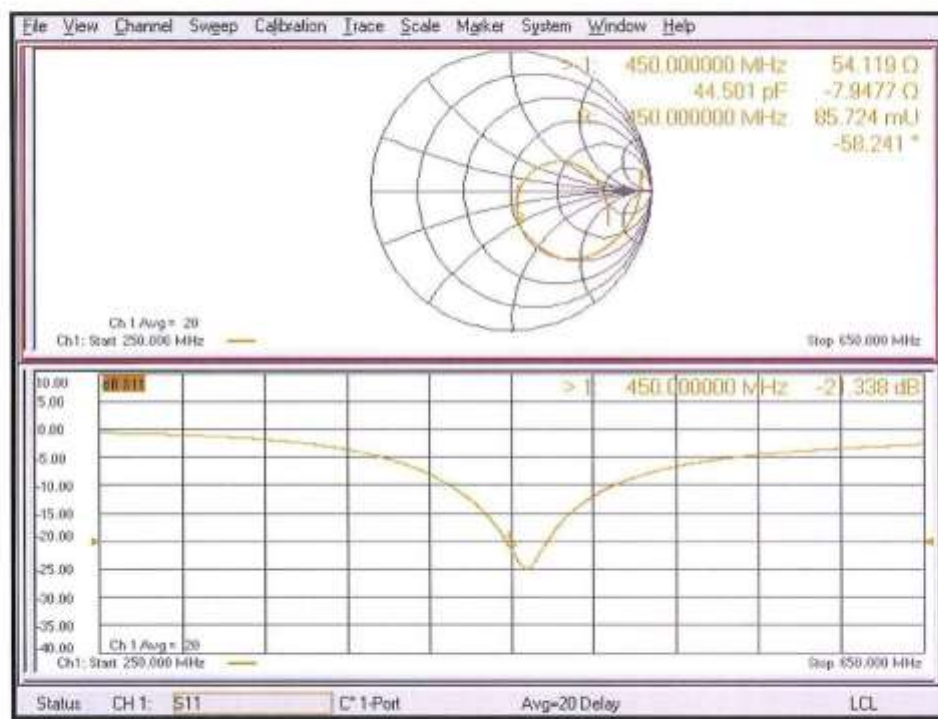
DASY52 Configuration:

- Probe: EX3DV4 - SN3877; ConvF(10.75, 10.75, 10.75) @ 450 MHz; Calibrated: 06.01.2025
- Sensor-Surface: 1.4mm (Mechanical Surface Detection)
- Electronics: DAE4 Sn654; Calibrated: 18.10.2024
- Phantom: ELI v6.0; Type: QDOVA003AA; Serial: TP:2034
- DASY52 52.10.4(1535); SEMCAD X 14.6.14(7501)

Dipole Calibration for Body Tissue/d=15mm, Pin=250mW/Zoom Scan (7x7x7)/Cube 0:

Measurement grid:  $dx=5\text{mm}$ ,  $dy=5\text{mm}$ ,  $dz=5\text{mm}$   
Reference Value = 42.88 V/m; Power Drift = -0.03 dB  
Peak SAR (extrapolated) = 1.80 W/kg  
**SAR(1 g) = 1.18 W/kg; SAR(10 g) = 0.799 W/kg**  
Smallest distance from peaks to all points 3 dB below: Larger than measurement grid (> 15 mm)  
Ratio of SAR at M2 to SAR at M1 = 65.9%  
Maximum value of SAR (measured) = 1.57 W/kg



**Impedance Measurement Plot for Body TSL**

## Dipole Data

The table below includes dipole impedance and return loss measurement data measured by Motorola Solutions' EME lab. The results meet the requirements stated in KDB 865664.

| Dipole 450-1054 | Head          |                |             | Body          |                |             |
|-----------------|---------------|----------------|-------------|---------------|----------------|-------------|
|                 | Impedance     |                | Return Loss | Impedance     |                | Return Loss |
| Date Measured   | real $\Omega$ | imag $j\Omega$ | dB          | real $\Omega$ | imag $j\Omega$ | dB          |
| 08/15/2024      | 62.26         | -6.15          | -20.27      | 53.29         | -7.90          | -20.53      |
| 07/14/2025      | 57.67         | -6.26          | -21.80      | 53.99         | -7.72          | -21.56      |

| Dipole 450-1077 | Head          |                |             | Body          |                |             |
|-----------------|---------------|----------------|-------------|---------------|----------------|-------------|
|                 | Impedance     |                | Return Loss | Impedance     |                | Return Loss |
| Date Measured   | real $\Omega$ | imag $j\Omega$ | dB          | real $\Omega$ | imag $j\Omega$ | dB          |
| 03/13/2025      | 56.26         | -3.45          | -21.16      | 51.56         | -9.72          | -20.54      |
| 01/25/2026      | 54.76         | -3.90          | -22.20      | 49.86         | -11.05         | -21.79      |

## Appendix D

### System Verification Check Scans

Motorola Solutions, EME Laboratory

2026-04-26, 09:38

System Performance Check Report

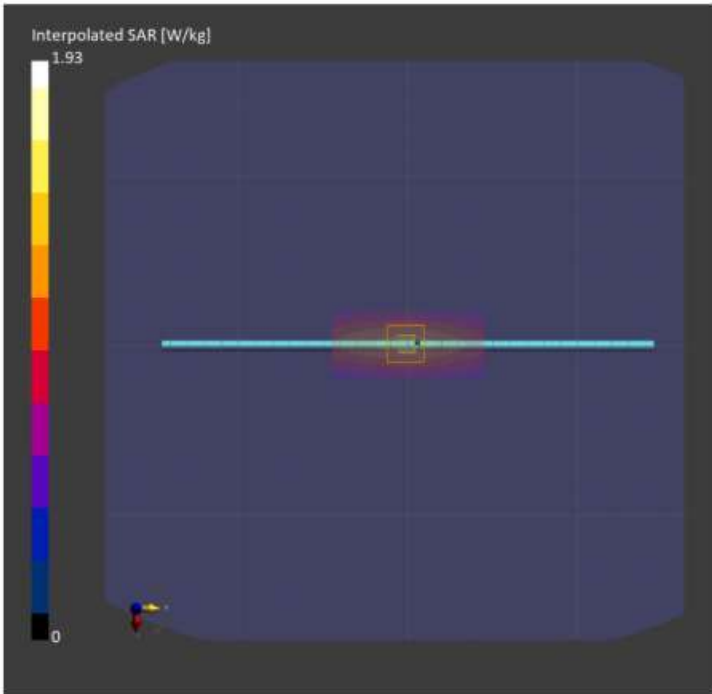
| Summary         |                 |     |             |             |              |
|-----------------|-----------------|-----|-------------|-------------|--------------|
| Dipole          | Frequency [MHz] | TSL | Power [dBm] | Dev. 1g [%] | Dev. 10g [%] |
| D450V3 ~ SN1054 | 450.0           | HSL | 23.9794     | 2.2         | 4.0          |

| Exposure Conditions          |                    |          |            |                                 |                   |                        |                  |
|------------------------------|--------------------|----------|------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL         | Test Distance [mm] | Band     | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, Head Simulating Liquid | 15                 | CW, 0--- |            | 450.000, 0                      | 11.12             | 0.887                  | 42.3             |

| Hardware Setup                     |                     |                             |                        |
|------------------------------------|---------------------|-----------------------------|------------------------|
| Phantom                            | TSL, Measured Date  | Probe, Calibration Date     | DAE, Calibration Date  |
| ELI V4.0 (20deg probe tilt) ~ 1037 | HSL450 , 2026-04-26 | EX3DV4 ~ SN7816, 2023-10-06 | DAE4 Sn729, 2024-07-10 |

| Scans Setup         |             |                    |
|---------------------|-------------|--------------------|
|                     | Area Scan   | Zoom Scan          |
| Grid Extents [mm]   | 40.0 x 90.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 10.0 x 15.0 | 6.0 x 6.0 x 1.5    |
| Sensor Surface [mm] | 3.0         | 1.4                |
| Graded Grid         | N/A         | Yes                |
| Grading Ratio       | N/A         | 1.5                |
| MAIA                | N/A         | N/A                |
| Surface Detection   | All points  | All points         |
| Scan Method         | Measured    | Measured           |

| Measurement Results |                     |                     |
|---------------------|---------------------|---------------------|
|                     | Area Scan           | Zoom Scan           |
| Date                | 2026-04-26, 09:38   | 2026-04-26, 09:49   |
| psSAR1g [W/Kg]      | 1.19                | 1.19                |
| psSAR10g [W/Kg]     | 0.832               | 0.804               |
| Power Drift [dB]    | 0.01                | -0.04               |
| TSL Correction      | Positive / Negative | Positive / Negative |



Motorola Solutions, EME Laboratory  
2026-05-15, 21:09

System Performance Check Report

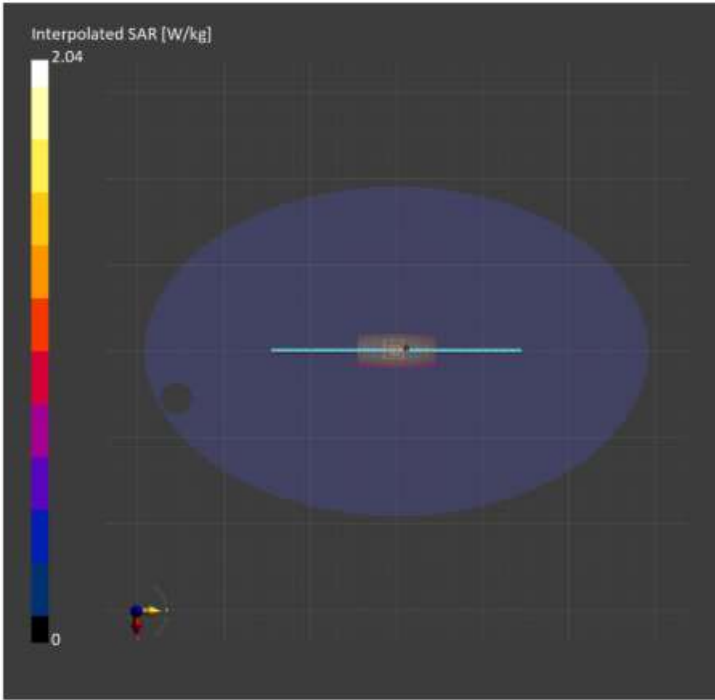
| Summary         |                 |     |             |             |              |
|-----------------|-----------------|-----|-------------|-------------|--------------|
| Dipole          | Frequency [MHz] | TSL | Power [dBm] | Dev. 1g [%] | Dev. 10g [%] |
| D450V3 – SN1077 | 450.0           | HSL | 23.98       | 5.1         | 5.3          |

| Exposure Conditions          |                    |      |            |                                 |                   |                        |                  |
|------------------------------|--------------------|------|------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL         | Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, Head Simulating Liquid | 15                 |      | CW, 0--    | 450.000, 0                      | 11.12             | 0.875                  | 41.7             |

| Hardware Setup                     |                     |                             |                        |
|------------------------------------|---------------------|-----------------------------|------------------------|
| Phantom                            | TSL, Measured Date  | Probe, Calibration Date     | DAE, Calibration Date  |
| ELI V4.0 (20deg probe tilt) – 1037 | HSL450 , 2026-05-15 | EX3DV4 – SN7816, 2023-10-06 | DAE4 Sn729, 2024-07-10 |

| Scans Setup         |             |                    |
|---------------------|-------------|--------------------|
|                     | Area Scan   | Zoom Scan          |
| Grid Extents [mm]   | 40.0 x 90.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 10.0 x 15.0 | 6.0 x 6.0 x 1.5    |
| Sensor Surface [mm] | 3.0         | 1.4                |
| Graded Grid         | N/A         | Yes                |
| Grading Ratio       | N/A         | 1.5                |
| MAIA                | N/A         | N/A                |
| Surface Detection   | VMS + 6p    | VMS + 6p           |
| Scan Method         | Measured    | Measured           |

| Measurement Results |                     |                     |
|---------------------|---------------------|---------------------|
|                     | Area Scan           | Zoom Scan           |
| Date                | 2026-05-15, 21:09   | 2026-05-15, 21:17   |
| psSAR1g [W/Kg]      | 1.23                | 1.22                |
| psSAR10g [W/Kg]     | 0.862               | 0.811               |
| Power Drift [dB]    | 0.00                | -0.01               |
| TSL Correction      | Positive / Negative | Positive / Negative |



## Appendix E

### DUT Scans

FCC Highest Assessments for LMR at Body – SAR Plot 1

Motorola Solutions, EME Laboratory

2026-04-27, 02:20

Measurement Report for PMUE6003A, 46326CG0037, BACK, Custom Band, CW, Channel 422200 (422.200 MHz)

Device Under Test Properties

| Model                      | Serial Number | Dimensions [mm]     |
|----------------------------|---------------|---------------------|
| AAH88SCK8AA3AN (PMUE6003A) | 46326CG0037   | 116.0 x 58.0 x 38.0 |

Exposure Conditions

| Phantom Section, TSL         | Position, Test Distance [mm] | Band        | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|------------------------------|------------------------------|-------------|------------|---------------------------------|-------------------|------------------------|------------------|
| Flat, Head Simulating Liquid | BACK, 0.00                   | Custom Band | CW, 0---   | 422.200, 422200                 | 11.12             | 0.862                  | 42.9             |

Hardware Setup

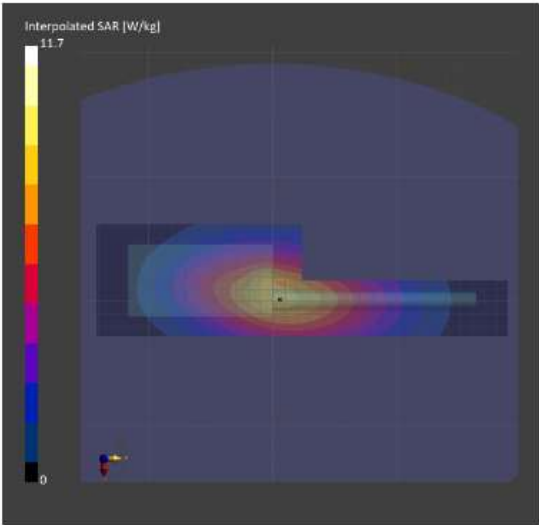
| Phantom                            | TSL, Measured Date  | Probe, Calibration Date     | DAE, Calibration Date  |
|------------------------------------|---------------------|-----------------------------|------------------------|
| ELI V4.0 (20deg probe tilt) – 1037 | HSL450 , 2026-04-26 | EX3DV4 – SN7816, 2023-10-06 | DAE4 Sn729, 2024-07-10 |

Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 90.0 x 330.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 15.0 x 15.0  | 6.0 x 6.0 x 1.5    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | N/A          | Yes                |
| Grading Ratio       | N/A          | 1.5                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

Measurement Results

|                    | Area Scan         | Zoom Scan         |
|--------------------|-------------------|-------------------|
| Date               | 2026-04-27, 02:20 | 2026-04-27, 02:31 |
| psSAR1g [W/Kg]     | 8.45              | 7.98              |
| psSAR10g [W/Kg]    | 6.15              | 5.79              |
| Power Drift [dB]   | -0.18             | -0.56             |
| TSL Correction     | Positive only     | Positive only     |
| M2/M1 [%]          |                   | 87.2              |
| Dist 3dB Peak [mm] |                   | > 15.0            |



FCC Highest Assessments for LMR at Face – SAR Plot 2

Motorola Solutions, EME Laboratory

2026-04-28, 00:45

Measurement Report for PMUE6003A, 46326CG0037,FRONT, Custom Band, CW, Channel 406200 (406.200 MHz)

Device Under Test Properties

| Model                      | Serial Number | Dimensions [mm]     |
|----------------------------|---------------|---------------------|
| AAH88SCK8AA3AN (PMUE6003A) | 46326CG0037   | 116.0 x 58.0 x 38.0 |

Exposure Conditions

| Phantom Section, TSL         | Position, Test Distance [mm] | Band        | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|------------------------------|------------------------------|-------------|------------|---------------------------------|-------------------|------------------------|------------------|
| Flat, Head Simulating Liquid | FRONT, 25.00                 | Custom Band | CW, 0--    | 406.200, 406200                 | 11.12             | 0.856                  | 43.4             |

Hardware Setup

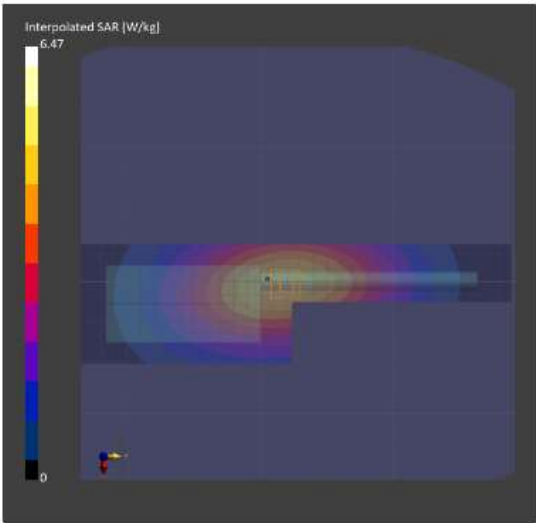
| Phantom                            | TSL, Measured Date  | Probe, Calibration Date     | DAE, Calibration Date  |
|------------------------------------|---------------------|-----------------------------|------------------------|
| ELI V4.0 (20deg probe tilt) – 1037 | HSL450 , 2026-04-27 | EX3DV4 – SN7816, 2023-10-06 | DAE4 Sn729, 2024-07-10 |

Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 90.0 x 330.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 15.0 x 15.0  | 6.0 x 6.0 x 1.5    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | N/A          | Yes                |
| Grading Ratio       | N/A          | 1.5                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

Measurement Results

|                    | Area Scan         | Zoom Scan         |
|--------------------|-------------------|-------------------|
| Date               | 2026-04-28, 00:45 | 2026-04-28, 00:54 |
| psSAR1g [W/Kg]     | 4.66              | 4.54              |
| psSAR10g [W/Kg]    | 3.42              | 3.39              |
| Power Drift [dB]   | -0.14             | -0.35             |
| TSL Correction     | Positive only     | Positive only     |
| M2/M1 [%]          |                   | 87.8              |
| Dist 3dB Peak [mm] |                   | > 15.0            |



ISED Highest Assessments for LMR (406.125 – 430 MHz) at Body – SAR Plot 3

Motorola Solutions, EME Laboratory

2026-05-16, 05:26

Measurement Report for PMUE6003A, 46326CG0037, BACK, Custom Band, CW, Channel 422200 (422.200 MHz)

Device Under Test Properties

| Model                      | Serial Number | Dimensions [mm]     |
|----------------------------|---------------|---------------------|
| AAH88SCK8AA3AN (PMUE6003A) | 46326CG0037   | 116.0 x 58.0 x 38.0 |

Exposure Conditions

| Phantom Section, TSL         | Position, Test Distance [mm] | Band        | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|------------------------------|------------------------------|-------------|------------|---------------------------------|-------------------|------------------------|------------------|
| Flat, Head Simulating Liquid | BACK, 0.00                   | Custom Band | CW, 0--    | 422.200, 422200                 | 11.12             | 0.852                  | 42.3             |

Hardware Setup

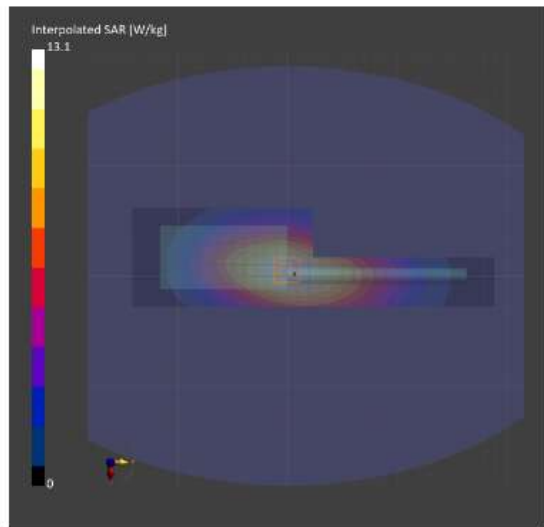
| Phantom                            | TSL, Measured Date  | Probe, Calibration Date     | DAE, Calibration Date  |
|------------------------------------|---------------------|-----------------------------|------------------------|
| ELI V4.0 (20deg probe tilt) – 1037 | HSL450 , 2026-05-15 | EX3DV4 – SN7816, 2023-10-06 | DAE4 Sn729, 2024-07-10 |

Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 90.0 x 330.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 15.0 x 15.0  | 6.0 x 6.0 x 1.5    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | N/A          | Yes                |
| Grading Ratio       | N/A          | 1.5                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

Measurement Results

|                    | Area Scan         | Zoom Scan         |
|--------------------|-------------------|-------------------|
| Date               | 2026-05-16, 05:26 | 2026-05-16, 05:35 |
| psSAR1g [W/Kg]     | 9.10              | 8.83              |
| psSAR10g [W/Kg]    | 6.60              | 6.37              |
| Power Drift [dB]   | -0.07             | -0.14             |
| TSL Correction     | Positive only     | Positive only     |
| M2/M1 [%]          |                   | 86.5              |
| Dist 3dB Peak [mm] |                   | > 15.0            |



ISED Highest Assessments for LMR (450 – 470 MHz) at Body – SAR Plot 5

Motorola Solutions, EME Laboratory

2026-04-27, 03:06

Measurement Report for PMUE6003A, 46326CG0037, BACK, Custom Band, CW, Channel 454100 (454.100 MHz)

Device Under Test Properties

| Model                      | Serial Number | Dimensions [mm]     |
|----------------------------|---------------|---------------------|
| AAH885CK8AA3AN (PMUE6003A) | 46326CG0037   | 116.0 x 58.0 x 38.0 |

Exposure Conditions

| Phantom Section, TSL         | Position, Test Distance [mm] | Band        | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|------------------------------|------------------------------|-------------|------------|---------------------------------|-------------------|------------------------|------------------|
| Flat, Head Simulating Liquid | BACK, 0.00                   | Custom Band | CW, 0--    | 454.100, 454100                 | 11.12             | 0.890                  | 42.2             |

Hardware Setup

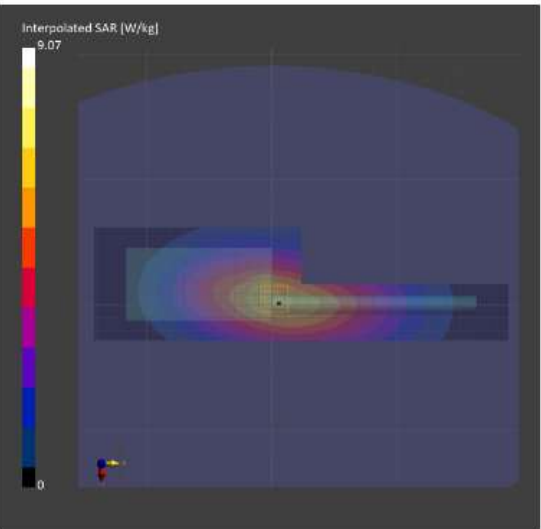
| Phantom                            | TSL, Measured Date  | Probe, Calibration Date     | DAE, Calibration Date  |
|------------------------------------|---------------------|-----------------------------|------------------------|
| ELI V4.0 (20deg probe tilt) - 1037 | HSL450 , 2026-04-26 | EX3DV4 - SN7816, 2023-10-06 | DAE4 Sn729, 2024-07-10 |

Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 90.0 x 330.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 15.0 x 15.0  | 6.0 x 6.0 x 1.5    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | N/A          | Yes                |
| Grading Ratio       | N/A          | 1.5                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

Measurement Results

|                    | Area Scan         | Zoom Scan         |
|--------------------|-------------------|-------------------|
| Date               | 2026-04-27, 03:06 | 2026-04-27, 03:16 |
| psSAR1g [W/Kg]     | 6.30              | 6.15              |
| psSAR10g [W/Kg]    | 4.57              | 4.44              |
| Power Drift [dB]   | -0.10             | -0.31             |
| TSL Correction     | Positive only     | Positive only     |
| M2/M1 [%]          |                   | 87.2              |
| Dist 3dB Peak [mm] |                   | > 15.0            |



ISED Highest Assessments for LMR (406.125 – 430 MHz) at Face – SAR Plot 4

Motorola Solutions, EME Laboratory  
2026-04-28, 01:55

Measurement Report for PMUE6003A, 46326CG0037,FRONT, D450, CW, Channel 30 (430.000 MHz)

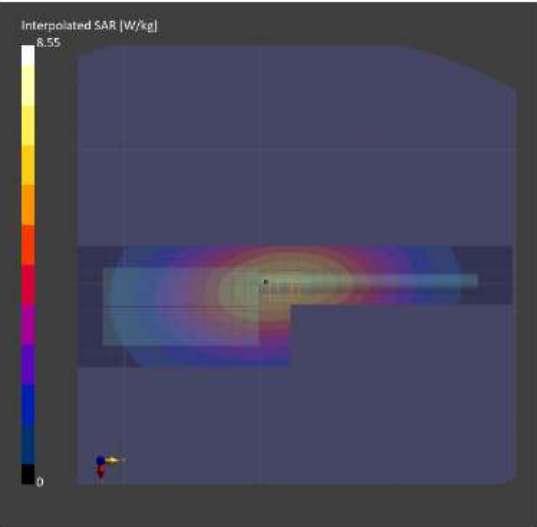
| Device Under Test Properties |               |                     |
|------------------------------|---------------|---------------------|
| Model                        | Serial Number | Dimensions [mm]     |
| AAH88SCK8AA3AN (PMUE6003A)   | 46326CG0037   | 116.0 x 58.0 x 38.0 |

| Exposure Conditions          |                              |      |            |                                 |                   |                        |                  |
|------------------------------|------------------------------|------|------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL         | Position, Test Distance [mm] | Band | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, Head Simulating Liquid | FRONT, 25.00                 | D450 | CW, 0--    | 430.000, 30                     | 11.12             | 0.876                  | 42.9             |

| Hardware Setup                     |                     |                             |                        |
|------------------------------------|---------------------|-----------------------------|------------------------|
| Phantom                            | TSL, Measured Date  | Probe, Calibration Date     | DAE, Calibration Date  |
| ELI V4.0 (20deg probe tilt) - 1037 | HSL450 , 2026-04-27 | EX3DV4 - SN7816, 2023-10-06 | DAE4 Sn729, 2024-07-10 |

| Scans Setup         |              |                    |
|---------------------|--------------|--------------------|
|                     | Area Scan    | Zoom Scan          |
| Grid Extents [mm]   | 90.0 x 330.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 15.0 x 15.0  | 6.0 x 6.0 x 1.5    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | N/A          | Yes                |
| Grading Ratio       | N/A          | 1.5                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

| Measurement Results |                   |                   |
|---------------------|-------------------|-------------------|
|                     | Area Scan         | Zoom Scan         |
| Date                | 2026-04-28, 01:55 | 2026-04-28, 02:04 |
| psSAR1g [W/Kg]      | 6.10              | 5.91              |
| psSAR10g [W/Kg]     | 4.47              | 4.40              |
| Power Drift [dB]    | -0.13             | -0.36             |
| TSL Correction      | Positive only     | Positive only     |
| M2/M1 [%]           |                   | 87.6              |
| Dist 3dB Peak [mm]  |                   | > 15.0            |



ISED Highest Assessments for LMR (450 – 470 MHz) at Face – SAR Plot 6

Motorola Solutions, EME Laboratory

2026-04-28, 02:44

Measurement Report for PMUE6003A, 46326CG0037,FRONT, Custom Band, CW, Channel 454100 (454.100 MHz)

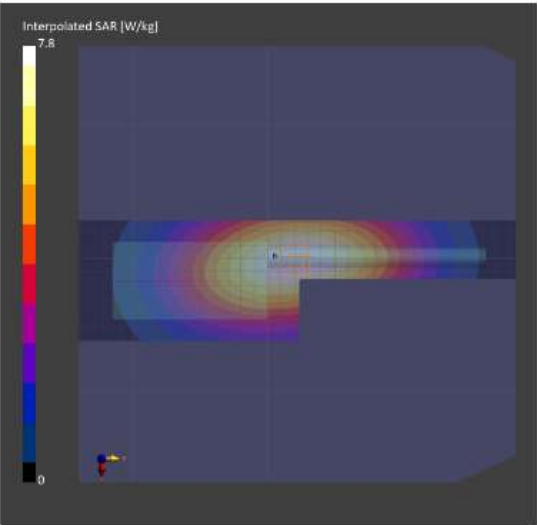
| Device Under Test Properties |               |                     |
|------------------------------|---------------|---------------------|
| Model                        | Serial Number | Dimensions [mm]     |
| AAH88SCK8AA3AN (PMUE6003A)   | 46326CG0037   | 116.0 x 58.0 x 38.0 |

| Exposure Conditions          |                              |             |            |                                 |                   |                        |                  |
|------------------------------|------------------------------|-------------|------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL         | Position, Test Distance [mm] | Band        | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, Head Simulating Liquid | FRONT, 25.00                 | Custom Band | CW, 0--    | 454.100, 454100                 | 11.12             | 0.896                  | 42.4             |

| Hardware Setup                     |                     |                             |                        |
|------------------------------------|---------------------|-----------------------------|------------------------|
| Phantom                            | TSL, Measured Date  | Probe, Calibration Date     | DAE, Calibration Date  |
| ELI V4.0 (20deg probe tilt) - 1037 | HSL450 , 2026-04-27 | EX3DV4 - SN7816, 2023-10-06 | DAE4 Sn729, 2024-07-10 |

| Scans Setup         |              |                    |
|---------------------|--------------|--------------------|
|                     | Area Scan    | Zoom Scan          |
| Grid Extents [mm]   | 90.0 x 330.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 15.0 x 15.0  | 6.0 x 6.0 x 1.5    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | N/A          | Yes                |
| Grading Ratio       | N/A          | 1.5                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

| Measurement Results |                   |                   |
|---------------------|-------------------|-------------------|
|                     | Area Scan         | Zoom Scan         |
| Date                | 2026-04-28, 02:44 | 2026-04-28, 02:53 |
| psSAR1g [W/Kg]      | 5.42              | 5.34              |
| psSAR10g [W/Kg]     | 3.96              | 3.96              |
| Power Drift [dB]    | -0.09             | -0.26             |
| TSL Correction      | Positive only     | Positive only     |
| M2/M1 [%]           |                   | 87.3              |
| Dist 3dB Peak [mm]  |                   | > 15.0            |



Outside FCC Highest Assessments for LMR at Body – SAR Plot 7

Motorola Solutions, EME Laboratory

2026-04-28, 04:43

Measurement Report for PMUE6003A, 46326CG0037, BACK, Custom Band, CW, Channel 400000 (400.000 MHz)

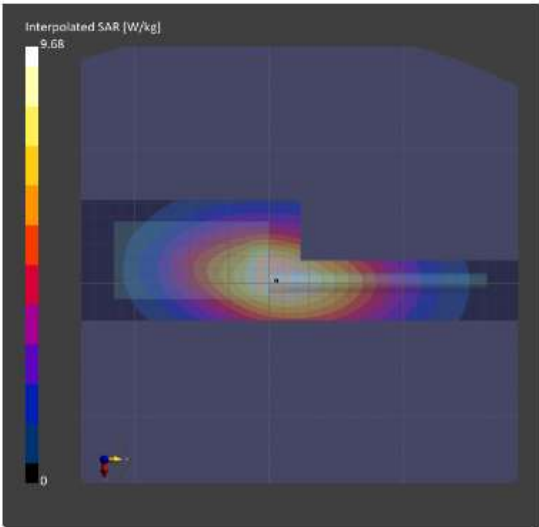
| Device Under Test Properties |               |                     |
|------------------------------|---------------|---------------------|
| Model                        | Serial Number | Dimensions [mm]     |
| AAH88SCK8AA3AN (PMUE6003A)   | 46326CG0037   | 116.0 x 58.0 x 38.0 |

| Exposure Conditions          |                              |             |            |                                 |                   |                        |                  |
|------------------------------|------------------------------|-------------|------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL         | Position, Test Distance [mm] | Band        | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, Head Simulating Liquid | BACK, 0.00                   | Custom Band | CW, 0--    | 400.000, 400000                 | 11.12             | 0.851                  | 43.5             |

| Hardware Setup                     |                     |                             |                        |
|------------------------------------|---------------------|-----------------------------|------------------------|
| Phantom                            | TSL, Measured Date  | Probe, Calibration Date     | DAE, Calibration Date  |
| ELI V4.0 (20deg probe tilt) – 1037 | HSL450 , 2026-04-27 | EX3DV4 – SN7816, 2023-10-06 | DAE4 Sn729, 2024-07-10 |

| Scans Setup         |              |                    |
|---------------------|--------------|--------------------|
|                     | Area Scan    | Zoom Scan          |
| Grid Extents [mm]   | 90.0 x 330.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 15.0 x 15.0  | 6.0 x 6.0 x 1.5    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | N/A          | Yes                |
| Grading Ratio       | N/A          | 1.5                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

| Measurement Results |                   |                   |
|---------------------|-------------------|-------------------|
|                     | Area Scan         | Zoom Scan         |
| Date                | 2026-04-28, 04:43 | 2026-04-28, 04:54 |
| psSAR1g [W/Kg]      | 6.85              | 6.58              |
| psSAR10g [W/Kg]     | 4.99              | 4.78              |
| Power Drift [dB]    | -0.14             | -0.44             |
| TSL Correction      | Positive only     | Positive only     |
| M2/M1 [%]           |                   | 86.8              |
| Dist 3dB Peak [mm]  |                   | > 15.0            |



Outside FCC Highest Assessments for LMR at Face – SAR Plot 8

Motorola Solutions, EME Laboratory

2026-04-28, 04:17

Measurement Report for PMUE6003A, 46326CG0037,FRONT, Custom Band, CW, Channel 400000 (400.000 MHz)

Device Under Test Properties

| Model                      | Serial Number | Dimensions [mm]     |
|----------------------------|---------------|---------------------|
| AAH88SCK8AA3AN (PMUE6003A) | 46326CG0037   | 116.0 x 58.0 x 38.0 |

Exposure Conditions

| Phantom Section, TSL         | Position, Test Distance [mm] | Band        | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
|------------------------------|------------------------------|-------------|------------|---------------------------------|-------------------|------------------------|------------------|
| Flat, Head Simulating Liquid | FRONT, 25.00                 | Custom Band | CW, 0--    | 400.000, 400000                 | 11.12             | 0.851                  | 43.5             |

Hardware Setup

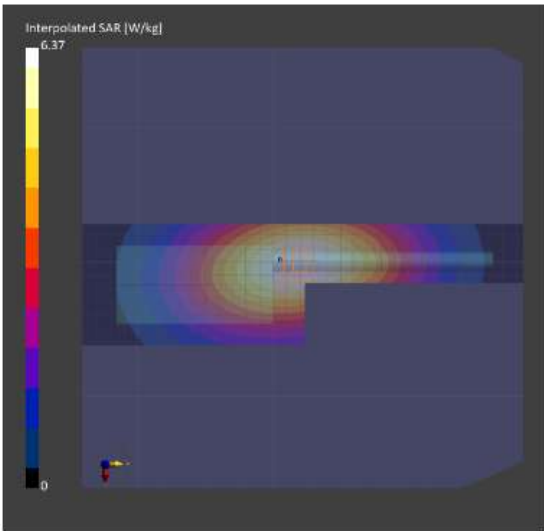
| Phantom                            | TSL, Measured Date  | Probe, Calibration Date     | DAE, Calibration Date  |
|------------------------------------|---------------------|-----------------------------|------------------------|
| ELI V4.0 (20deg probe tilt) – 1037 | HSL450 , 2026-04-27 | EX3DV4 – SN7816, 2023-10-06 | DAE4 Sn729, 2024-07-10 |

Scans Setup

|                     | Area Scan    | Zoom Scan          |
|---------------------|--------------|--------------------|
| Grid Extents [mm]   | 90.0 x 330.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 15.0 x 15.0  | 6.0 x 6.0 x 1.5    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | N/A          | Yes                |
| Grading Ratio       | N/A          | 1.5                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

Measurement Results

|                    | Area Scan         | Zoom Scan         |
|--------------------|-------------------|-------------------|
| Date               | 2026-04-28, 04:17 | 2026-04-28, 04:26 |
| psSAR1g [W/Kg]     | 4.53              | 4.45              |
| psSAR10g [W/Kg]    | 3.32              | 3.33              |
| Power Drift [dB]   | -0.10             | -0.31             |
| TSL Correction     | Positive only     | Positive only     |
| M2/M1 [%]          |                   | 87.3              |
| Dist 3dB Peak [mm] |                   | > 15.0            |



## APPENDIX F

### Shortened Scan of Highest SAR configuration

Shortened Scan – SAR Plot 9

Motorola Solutions, EME Laboratory

2026-05-16, 05:26

Measurement Report for PMUE6003A, 46326CG0037,BACK, Custom Band, CW, Channel 422200 (422.200 MHz)

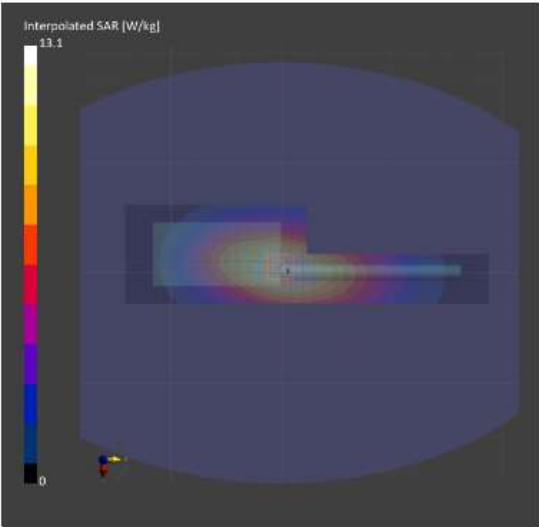
| Device Under Test Properties |               |                     |
|------------------------------|---------------|---------------------|
| Model                        | Serial Number | Dimensions [mm]     |
| AAH88SCK8AA3AN (PMUE6003A)   | 46326CG0037   | 116.0 x 58.0 x 38.0 |

| Exposure Conditions          |                              |             |            |                                 |                   |                        |                  |
|------------------------------|------------------------------|-------------|------------|---------------------------------|-------------------|------------------------|------------------|
| Phantom Section, TSL         | Position, Test Distance [mm] | Band        | Group, UID | Frequency [MHz], Channel Number | Conversion Factor | TSL Conductivity [S/m] | TSL Permittivity |
| Flat, Head Simulating Liquid | BACK, 0.00                   | Custom Band | CW, 0--    | 422.200, 422200                 | 11.12             | 0.852                  | 42.3             |

| Hardware Setup                     |                     |                             |                        |
|------------------------------------|---------------------|-----------------------------|------------------------|
| Phantom                            | TSL, Measured Date  | Probe, Calibration Date     | DAE, Calibration Date  |
| ELI V4.0 (20deg probe tilt) - 1037 | HSL450 , 2026-05-15 | EX3DV4 - SN7816, 2023-10-06 | DAE4 Sn729, 2024-07-10 |

| Scans Setup         |              |                    |
|---------------------|--------------|--------------------|
|                     | Area Scan    | Zoom Scan          |
| Grid Extents [mm]   | 90.0 x 330.0 | 30.0 x 30.0 x 30.0 |
| Grid Steps [mm]     | 15.0 x 15.0  | 6.0 x 6.0 x 1.5    |
| Sensor Surface [mm] | 3.0          | 1.4                |
| Graded Grid         | N/A          | Yes                |
| Grading Ratio       | N/A          | 1.5                |
| MAIA                | N/A          | N/A                |
| Surface Detection   | VMS + 6p     | VMS + 6p           |
| Scan Method         | Measured     | Measured           |

| Measurement Results |                   |                   |
|---------------------|-------------------|-------------------|
|                     | Area Scan         | Zoom Scan         |
| Date                | 2026-05-16, 05:26 | 2026-05-16, 05:35 |
| psSAR1g [W/Kg]      | 9.10              | 8.83              |
| psSAR10g [W/Kg]     | 6.60              | 6.37              |
| Power Drift [dB]    | -0.07             | -0.14             |
| TSL Correction      | Positive only     | Positive only     |
| M2/M1 [%]           |                   | 86.5              |
| Dist 3dB Peak [mm]  |                   | > 15.0            |



Shortened scan reflects highest SAR producing configuration and is compared to the full scan.

| Scan Description        | Referenced Table | Test Time (min.) | SAR 1g (W/kg) |
|-------------------------|------------------|------------------|---------------|
| Shorten scan (zoom)     | 21               | 10               | 4.62          |
| Full scan (area & zoom) | 17               | 15               | 4.57          |