

|                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                  |                                                                                                                                                                                                                                                                                                                                                                                            |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------|------------------------------|--------------------------|----------------|------------------------------|----------------------------------------|-----------------------------|---------------------------------------------------------------------------------------------------------|------------------|----------------------|---------------------|-------------|-------------------------------------|------------|------------------------------------------------------|----------------|-----------------------|------------------------|----------------------------|------------|-----------------------|--------------------------|--------------------------|------------------------------------------------------------------------------------|--------------------------|----------|---------------------------|----------|------------------------------------------------------|----------------------------------|-------------------------------------------------------------------------------------------------------------------------------------------|-------------|
|  <b>MOTOROLA SOLUTIONS</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |    <br><b>CERTIFICATE 2518.08</b> <b>SAMM 825</b> |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>MOTOROLA PENANG ADV. COMM. LABORATORY</b><br>Motorola Solutions Malaysia Sdn Bhd,<br>Plot 2A, Medan Bayan Lepas,<br>Mukim 12 S.W.D, 11900 Bayan Lepas,<br>Penang, Malaysia.                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                   | <b>FCC / ISED TEST REPORT</b><br><b>Report Revision : Rev.D</b>                                                                                                                                                                                                                                                                                                                            |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <table><tr><td><b>Date/s Tested</b></td><td>: 06-May-2025 - 23-June-2025</td></tr><tr><td><b>Report Issue Date</b></td><td>: 06-July-2025</td></tr><tr><td><b>Manufacturer/Location</b></td><td>: Motorola Solutions INC. (Plantation)</td></tr><tr><td><b>Manufacturer Address</b></td><td>: Motorola Solutions INC. (Plantation), 8000 West Sunrise Blvd MD 41-128, USA Plantation FL 333222-9947</td></tr><tr><td><b>Requestor</b></td><td>: Stankovska Daniela</td></tr><tr><td><b>Product Type</b></td><td>: Hand-held</td></tr><tr><td><b>Product Marketing Name (PMN)</b></td><td>: APX NEXT</td></tr><tr><td><b>Hardware Version Identification Number (HVIN)</b></td><td>: H55TGT9PW8BN</td></tr><tr><td><b>Frequency Band</b></td><td>: Refer to section 1.4</td></tr><tr><td><b>Max RF Output Power</b></td><td>: 251.19mW</td></tr><tr><td><b>Applicant Name</b></td><td>: Motorola Solutions Inc</td></tr><tr><td><b>Applicant Address</b></td><td>: Plot 2A, Medan Bayan Lepas, Mukim 12, S.W.D. 11900 Bayan Lepas, Penang, Malaysia</td></tr><tr><td><b>FCC Registrations</b></td><td>: 461337</td></tr><tr><td><b>ISED Registrations</b></td><td>: MY0001</td></tr><tr><td><b>Firmware Version Identification Number (FVIN)</b></td><td>: D37.00.17 (BP), D37.00.02 (AP)</td></tr></table> <p><b>The equipment was tested accordance to the requirement listed below:</b></p> <table><tr><td>(LTE Band 17)<br/>FCC 47 CFR Part 2 / 27<br/>ISED RSS-GEN (Issue 5), Amendment 1 (Mar 2019),<br/>Amendment 2 (Feb 2021)<br/>RSS-130 (Issue 2)</td><td><b>PASS</b></td></tr></table> |                                                                                                                                                                                                                                                                                                                                                                                            | <b>Date/s Tested</b> | : 06-May-2025 - 23-June-2025 | <b>Report Issue Date</b> | : 06-July-2025 | <b>Manufacturer/Location</b> | : Motorola Solutions INC. (Plantation) | <b>Manufacturer Address</b> | : Motorola Solutions INC. (Plantation), 8000 West Sunrise Blvd MD 41-128, USA Plantation FL 333222-9947 | <b>Requestor</b> | : Stankovska Daniela | <b>Product Type</b> | : Hand-held | <b>Product Marketing Name (PMN)</b> | : APX NEXT | <b>Hardware Version Identification Number (HVIN)</b> | : H55TGT9PW8BN | <b>Frequency Band</b> | : Refer to section 1.4 | <b>Max RF Output Power</b> | : 251.19mW | <b>Applicant Name</b> | : Motorola Solutions Inc | <b>Applicant Address</b> | : Plot 2A, Medan Bayan Lepas, Mukim 12, S.W.D. 11900 Bayan Lepas, Penang, Malaysia | <b>FCC Registrations</b> | : 461337 | <b>ISED Registrations</b> | : MY0001 | <b>Firmware Version Identification Number (FVIN)</b> | : D37.00.17 (BP), D37.00.02 (AP) | (LTE Band 17)<br>FCC 47 CFR Part 2 / 27<br>ISED RSS-GEN (Issue 5), Amendment 1 (Mar 2019),<br>Amendment 2 (Feb 2021)<br>RSS-130 (Issue 2) | <b>PASS</b> |
| <b>Date/s Tested</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | : 06-May-2025 - 23-June-2025                                                                                                                                                                                                                                                                                                                                                               |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>Report Issue Date</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | : 06-July-2025                                                                                                                                                                                                                                                                                                                                                                             |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>Manufacturer/Location</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                     | : Motorola Solutions INC. (Plantation)                                                                                                                                                                                                                                                                                                                                                     |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>Manufacturer Address</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      | : Motorola Solutions INC. (Plantation), 8000 West Sunrise Blvd MD 41-128, USA Plantation FL 333222-9947                                                                                                                                                                                                                                                                                    |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>Requestor</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                 | : Stankovska Daniela                                                                                                                                                                                                                                                                                                                                                                       |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>Product Type</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | : Hand-held                                                                                                                                                                                                                                                                                                                                                                                |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>Product Marketing Name (PMN)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                              | : APX NEXT                                                                                                                                                                                                                                                                                                                                                                                 |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>Hardware Version Identification Number (HVIN)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | : H55TGT9PW8BN                                                                                                                                                                                                                                                                                                                                                                             |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>Frequency Band</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | : Refer to section 1.4                                                                                                                                                                                                                                                                                                                                                                     |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>Max RF Output Power</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                       | : 251.19mW                                                                                                                                                                                                                                                                                                                                                                                 |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>Applicant Name</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                            | : Motorola Solutions Inc                                                                                                                                                                                                                                                                                                                                                                   |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>Applicant Address</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | : Plot 2A, Medan Bayan Lepas, Mukim 12, S.W.D. 11900 Bayan Lepas, Penang, Malaysia                                                                                                                                                                                                                                                                                                         |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>FCC Registrations</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                         | : 461337                                                                                                                                                                                                                                                                                                                                                                                   |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>ISED Registrations</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | : MY0001                                                                                                                                                                                                                                                                                                                                                                                   |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <b>Firmware Version Identification Number (FVIN)</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | : D37.00.17 (BP), D37.00.02 (AP)                                                                                                                                                                                                                                                                                                                                                           |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| (LTE Band 17)<br>FCC 47 CFR Part 2 / 27<br>ISED RSS-GEN (Issue 5), Amendment 1 (Mar 2019),<br>Amendment 2 (Feb 2021)<br>RSS-130 (Issue 2)                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                        | <b>PASS</b>                                                                                                                                                                                                                                                                                                                                                                                |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <p>This report shall not be reproduced without written approval from an officially designated representative of the Motorola Penang Adv. Comm. Laboratory. The results and statements contained in this report pertain only to the device(s) evaluated.</p>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                      |                                                                                                                                                                                                                                                                                                                                                                                            |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |
| <p>Prepared By:</p> <br><b>Nur Amanina binti Ahmad Nizam</b><br><b>Technician</b>                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                                             | <p>Approve Signatory:</p> <br><b>Zulhairudin bin Zulkifli</b><br><b>Responsible Engineer</b>                                                                                                                                                                                                          |                      |                              |                          |                |                              |                                        |                             |                                                                                                         |                  |                      |                     |             |                                     |            |                                                      |                |                       |                        |                            |            |                       |                          |                          |                                                                                    |                          |          |                           |          |                                                      |                                  |                                                                                                                                           |             |

## Table of Contents

|         |                                                                        |    |
|---------|------------------------------------------------------------------------|----|
| 1.0.    | Summary of Test Results.....                                           | 3  |
| 1.1.    | Measurement Uncertainty .....                                          | 3  |
| 1.2.    | Equipment List.....                                                    | 4  |
| 1.3.    | General Information .....                                              | 5  |
| 1.4.    | Channel Number and Frequency Info .....                                | 7  |
| 1.5.    | Test Mode Applicability and Tested Channel Detail .....                | 7  |
| 1.6.    | Conducted RF Output Power .....                                        | 9  |
| 1.6.1.  | Test Setup.....                                                        | 9  |
| 1.6.2.  | Test Limits .....                                                      | 9  |
| 1.6.3.  | Conducted RF Output Power – LTE Band 17 (704-716MHz) .....             | 10 |
| 1.6.4.  | Effective Radiated Power – LTE Band 17 (704-716MHz).....               | 11 |
| 1.7.    | Peak-to-Average Power Ratio .....                                      | 12 |
| 1.7.1.  | Test Setup.....                                                        | 12 |
| 1.7.2.  | Test Limit.....                                                        | 12 |
| 1.7.3.  | Peak-to-Average Power Ratio – LTE Band 17 (704-716MHz) .....           | 13 |
| 1.8.    | Occupied Bandwidth .....                                               | 14 |
| 1.8.1.  | Test Setup.....                                                        | 14 |
| 1.8.2.  | Test Limit.....                                                        | 14 |
| 1.8.3.  | Occupied Bandwidth – LTE Band 17 (704-716MHz) .....                    | 15 |
| 1.9.    | Frequency Stability .....                                              | 17 |
| 1.9.1.  | Test Setup.....                                                        | 17 |
| 1.9.2.  | Test Limit.....                                                        | 17 |
| 1.9.3.  | Frequency Stability – LTE Band 17 (704-716MHz) .....                   | 18 |
| 1.10.   | Band Edge Conducted Spurious Emission .....                            | 20 |
| 1.10.1. | Test Setup .....                                                       | 20 |
| 1.10.2. | Test Limit.....                                                        | 20 |
| 1.10.3. | Band Edge Conducted Spurious Emission – LTE Band 17 (704-716MHz) ..... | 21 |
| 1.11.   | Conducted Spurious Emission .....                                      | 25 |
| 1.11.1. | Test Setup .....                                                       | 25 |
| 1.11.2. | Test Limit.....                                                        | 25 |
| 1.11.3. | Conducted Spurious Emissions – LTE Band 17 (704-716MHz) .....          | 26 |
| 1.12.   | Radiated Spurious Emission.....                                        | 30 |
| 1.12.1. | Test Setup .....                                                       | 30 |
| 1.12.2. | Test Limit.....                                                        | 30 |
| 1.12.3. | Radiated Spurious Emission – LTE Band 17 (704-716MHz).....             | 31 |
| 1.13.   | Effective Radiated Power (ERP) .....                                   | 40 |
| 1.13.1. | Test Setup .....                                                       | 40 |
| 1.13.2. | Test Limit.....                                                        | 40 |
| 1.13.3. | Effective Radiated Power (ERP) - LTE Band 17 (704-716MHz) .....        | 40 |

## REVISION HISTORY

| Revision History | Description                                                                                                                    | Date           | Originator  |
|------------------|--------------------------------------------------------------------------------------------------------------------------------|----------------|-------------|
| Rev. A           | Initial Report                                                                                                                 | 06-July-2025   | Nur Amanina |
| Rev. B           | Update Report Issue Date from 06-July-2024 to 06-July-2025                                                                     | 01-August-2025 | Nur Amanina |
| Rev. C           | 1.Update Antenna type from Stamped Metal to PIFA<br>2.Update antenna gain from 0.7dBi to 0dBi<br>3.Update ERP data             | 06-August-2025 | Nur Amanina |
| Rev. D           | 1.Update Emission designator from 8M93G7D to 8M95G7D.<br>2.Update typo at Frequency Stability from 703.5008144 to 713.5008144. | 21-August-2025 | Nur Amanina |

### 1.0. Summary of Test Results

| FCC Clause                | ISED Clause                 | Test Item                             | Results | Remarks                                           | Serial Number Tested |
|---------------------------|-----------------------------|---------------------------------------|---------|---------------------------------------------------|----------------------|
| 2.1046                    | RSS-Gen 6.12<br>RSS-130 4.6 | Conducted RF Output Power             | Pass    | Meet the requirement of limit                     | 437ZBG0235           |
| -                         | RSS-130 4.6                 | Peak-to-Average Power Ratio           | Pass    | Meet the requirement of limit                     | 437ZBG0235           |
| 2.1046                    | RSS-Gen 6.7                 | Occupied Bandwidth (26dBc, 99%)       | Pass    | Meet the requirement of limit                     | 437ZBG0235           |
| 2.1055<br>27.54           | RSS-130 4.5                 | Frequency Stability                   | Pass    | Meet the requirement of limit                     | 437ZBG0235           |
| 2.1051<br>27.53(g)        | RSS-Gen 6.13<br>RSS-130 4.7 | Band Edge Conducted Spurious Emission | Pass    | Meet the requirement of limit                     | 437ZBG0235           |
| 2.1051<br>27.53(g)        | RSS-Gen 6.13<br>RSS-130 4.7 | Conducted Spurious Emissions          | Pass    | Meet the requirement of limit                     | 437ZBG0235           |
| 2.1053<br>27.53(g)        | RSS-130 4.7                 | Radiated Spurious Emission            | Pass    | -52.2727 dBm<br>(Margin: 39.2727 dB, Noise Floor) | 437ZBG0594           |
| 2.1049<br>27.50(c)(9)(10) | RSS-130 4.6                 | Effective Radiated Power (ERP)        | Pass    | Meet the requirement of limit                     | 437ZBG0235           |

### 1.1. Measurement Uncertainty

| Measurement                    | Frequency        | Expanded Uncertainty (k=1.96) (±dB) |
|--------------------------------|------------------|-------------------------------------|
| Radiated Emissions up to 1 GHz | 30MHz ~ 200MHz   | 4.03                                |
|                                | 200MHz ~ 1000MHz | 4.03                                |
| Radiated Emissions above 1 GHz | 1GHz ~ 18GHz     | 4.03                                |
|                                | 18GHz ~ 25GHz    | 4.03                                |

## 1.2. Equipment List

| DESCRIPTION                                | MODEL                | SERIAL NUMBER | CALIBRATION DATE | CALIBRATION DUE DATE |
|--------------------------------------------|----------------------|---------------|------------------|----------------------|
| BROADBAND ATE 1 (RF CONDUCTED TESTS)       |                      |               |                  |                      |
| WIDEBAND RADIO COMMUNICATION TESTER        | CMW500               | 154550        | 16-Aug-24        | 16-Aug-25            |
| WIDEBAND RADIO COMMUNICATION TESTER        | CMW500               | 163061        | 19-Aug-24        | 19-Aug-25            |
| SIGNAL ANALYZER                            | FSV40                | 101431        | 8-Aug-24         | 08-Aug-25            |
| CHAMBER                                    | SH-641               | 92003150      | 12-Sep-24        | 12-Sep-25            |
| POWER SUPPLY                               | 6652A                | MY40001437    | 03-Mar-25        | 03-Mar-26            |
| TEST SOFTWARE                              | R&S CMWrun           |               |                  |                      |
| VERSION                                    | V.1.9.8              |               |                  |                      |
| RADIATED SPURIOUS EMISSION (EMC CHAMBER 1) |                      |               |                  |                      |
| DRG HORN FREQ.                             | SAS-571              | 566           | 09-Jan-25        | 09-Jan-26            |
| DRG HORN FREQ.                             | SAS-571              | 719           | 09-Oct-24        | 09-Oct-25            |
| DC Power Supply                            | 6032A                | MY41001736    | 05-Aug-24        | 05-Aug-25            |
| SIGNAL GENERATOR                           | SMB 100A             | 180683        | 20-Dec-24        | 20-Dec-27            |
| EMI TEST RECEIVER                          | ESW44                | 101750        | 07-Aug-24        | 07-Aug-25            |
| 5m SEMI-ANECHOIC CHAMBER                   | S800-HX              | J2308         | Not required     | Not required         |
| BILOG ANTENNA                              | CBL6112B             | 2964          | 08-Oct-24        | 08-Oct-25            |
| BILOG ANTENNA                              | CBL6112D             | 55546         | 05-Jun-24        | 05-Jun-25            |
| DATA LOGGER THERMOHYGROMETER               | SDL500               | A.016800      | 26-Jun-24        | 26-Jun-25            |
| SYSTEM CONTROLLER                          | SC104V               | 050806-1      | Not required     | Not required         |
| TURNTABLE FLUSH MOUNT 2M                   | FM2011               | FM2011-001    | Not required     | Not required         |
| ANTENNA POSITIONING TOWER                  | TLT2                 | 090308-5      | Not required     | Not required         |
| BROAD-BAND HORN ANTENNA                    | BBHA9170             | BBHA9170143   | 30-Sep-24        | 30-Sep-25            |
| PREAMPLIFIER 18-40GHz                      | JS44-18004000-33-8P  | 2034566       | Not required     | Not required         |
| PREAMPLIFIER 1-18GHz                       | EMC0518A45SE         | 980890        | 04-Aug-24        | 04-Aug-25            |
| PREAMPLIFIER                               | PAM-0118P            | 269           | 27-Aug-24        | 27-Aug-25            |
| LOOP ANTENNA                               | 6502                 | 00208416      | 08-Oct-24        | 08-Oct-25            |
| TEST SOFTWARE                              | EMC.FCC.IC.RE.v1.7.1 |               |                  |                      |
| VERSION                                    | 1.7.1                |               |                  |                      |

### 1.3. General Information

#### General Description of EUT

|                                |                                |                                                |                    |         |
|--------------------------------|--------------------------------|------------------------------------------------|--------------------|---------|
| Product                        | APX NEXT                       |                                                |                    |         |
| Brand                          | Motorola Solutions             |                                                |                    |         |
| Test Model                     | H55TGT9PW8BN                   |                                                |                    |         |
| Power Supply Rating            | 7.5 Vdc                        |                                                |                    |         |
| Mode of Operation              | LTE Band 17                    |                                                |                    |         |
| Modulation Type                | QPSK, 16QAM                    |                                                |                    |         |
| Operating Frequency            | LTE Band 17                    | Channel Bandwidth 5MHz                         | 706.5MHz~713.5MHz  |         |
|                                |                                | Channel Bandwidth 10MHz                        | 709.0MHz~711.0MHz  |         |
| Max. Conducted RF Output Power | LTE Band 17 QPSK               | Channel Bandwidth 5MHz                         | 23.482dBm (0.223W) |         |
|                                |                                | Channel Bandwidth 10MHz                        | 23.453dBm (0.221W) |         |
|                                | LTE Band 17 16QAM              | Channel Bandwidth 5MHz                         | 22.694dBm (0.186W) |         |
|                                |                                | Channel Bandwidth 10MHz                        | 22.653dBm (0.184W) |         |
| Emission Designator            | LTE Band 17                    |                                                | QPSK               | 16QAM   |
|                                |                                | Channel Bandwidth 5MHz                         | 4M48G7D            | 4M48D7W |
|                                |                                | Channel Bandwidth 10MHz                        | 8M95G7D            | 8M95D7W |
| Antenna Type                   | LTE Band 17                    | PIFA, Antenna LTE Low Band 704 – 716MHz (0dBi) |                    |         |
| SW Version                     | D37.00.17 (BP), D37.00.02 (AP) |                                                |                    |         |
| HW Version                     | P2                             |                                                |                    |         |

Note:

1. The EUT contains following accessory devices and data cable.

| Item           | Brand    | Model or P/N | Specification                                |
|----------------|----------|--------------|----------------------------------------------|
| Li-Ion Battery | MOTOROLA | PMNN4895A    | BATTERY PACK, BATT IMPRES 2 LIION IP68 5800T |

### Description of Support Units

The EUT has been tested as an independent unit together with other necessary accessories or support units.

The following support units or accessories were used to form a representative test configuration during the tests.

| NO. | Product                             | Brand | Model No. | Serial No. | FCC ID |
|-----|-------------------------------------|-------|-----------|------------|--------|
| 1   | Wideband Radio Communication Tester | R&S   | CMW500    | 154550     | NA     |
| 2   | Wideband Radio Communication Tester | R&S   | CMW500    | 163061     | NA     |

| NO. | Signal Cable Description of The above Support Units |
|-----|-----------------------------------------------------|
| 1   | NA                                                  |

### Note:

1. All power cords of the above support units are non-shielded.
2. Item 1 acted as a communication partner to transfer data.

### EUT Operating Conditions

The EUT makes a call to the communication simulator. The communication simulator station system controlled a EUT to export maximum output power under transmission mode and specific channel frequency.

### General Description of Applied Standards

The EUT is a RF Product. According to the specifications of the manufacturer, it must comply with the requirements of the following standards:

**KDB 971168 D01 Power Meas License Digital Systems v03r01**

**KDB 971168 D02 Misc OOB License Digital Systems v02r01**

**ANSI C63.26**

**NOTE:** All test items have been performed and recorded as per the above standards.

#### 1.4. Channel Number and Frequency Info

| Band        | Bandwidth Supported | Available Channel Number | Test Channel Number |             |              | Test Channel Frequency (MHz) |             |              |
|-------------|---------------------|--------------------------|---------------------|-------------|--------------|------------------------------|-------------|--------------|
|             |                     |                          | Low Channel         | Mid Channel | High Channel | Low Channel                  | Mid Channel | High Channel |
| LTE Band 17 | 5 MHz               | 23755 ~ 23825            | 23755               | 23790       | 23825        | 706.5                        | 710.0       | 713.5        |
|             | 10 MHz              | 23780 ~ 23800            | 23780               | 23790       | 23800        | 709.0                        | 710.0       | 711.0        |

#### 1.5. Test Mode Applicability and Tested Channel Detail

Pre-scan also have been conducted with the accessory devices listed in section table 1.3, only the worst case radiated emission results of the combination test configuration is reported in this report.

The following channel(s) was (were) selected for the final test as listed below:

##### LTE Band 17

| Test Item                             | Available Channel | Tested Channel      | Channel Bandwidth | Modulation  | Mode                                                             |
|---------------------------------------|-------------------|---------------------|-------------------|-------------|------------------------------------------------------------------|
| Conducted RF Output Power             | 23755 ~ 23825     | 23755, 23710, 23825 | 5 MHz             | QPSK, 16QAM | As per table 1.6.3                                               |
|                                       | 23780 ~ 23800     | 23780, 23710, 23800 | 10 MHz            |             |                                                                  |
| Peak-to-Average Power Ratio           | 23755 ~ 23825     | 23755, 23710, 23825 | 5 MHz             | QPSK, 16QAM | 25 RB / 0 RB Offset                                              |
|                                       | 23780 ~ 23800     | 23780, 23710, 23800 | 10 MHz            |             | 50 RB / 0 RB Offset                                              |
| Occupied Bandwidth                    | 23755 ~ 23825     | 23755, 23710, 23825 | 5 MHz             | QPSK, 16QAM | 25 RB / 0 RB Offset                                              |
|                                       | 23780 ~ 23800     | 23780, 23710, 23800 | 10 MHz            |             | 50 RB / 0 RB Offset                                              |
| Frequency Stability                   | 23755 ~ 23825     | 23755, 23825        | 5 MHz             | QPSK        | 25 RB / 0 RB Offset                                              |
|                                       | 23780 ~ 23800     | 23780, 23800        | 10 MHz            |             | 50 RB / 0 RB Offset                                              |
| Band Edge Conducted Spurious Emission | 23755 ~ 23825     | 23755, 23825        | 5 MHz             | QPSK, 16QAM | 1 RB / 0 RB Offset<br>1 RB / 24 RB Offset<br>25 RB / 0 RB Offset |
|                                       | 23780 ~ 23800     | 23780, 23800        | 10 MHz            |             | 1 RB / 0 RB Offset<br>1 RB / 49 RB Offset<br>50 RB / 0 RB Offset |
| Conducted Spurious Emission           | 23755 ~ 23825     | 23755, 23710, 23825 | 5 MHz             | QPSK        | 1 RB / 13 RB Offset                                              |
|                                       | 23780 ~ 23800     | 23780, 23710, 23800 | 10 MHz            |             | 1 RB / 25 RB Offset                                              |
| Radiated Spurious Emission            | 23755 ~ 23825     | 23755               | 5 MHz             | QPSK        | 1 RB / 13 RB Offset                                              |
|                                       | 23780 ~ 23800     | 23710               | 10 MHz            | QPSK        | 1 RB / 25 RB Offset                                              |
|                                       | 23780 ~ 23800     | 23800               | 10 MHz            | QPSK        | 1 RB / 25 RB Offset                                              |
| Effective Radiated Power (ERP)        | 23755 ~ 23825     | 23755, 23710, 23825 | 5 MHz             | QPSK, 16QAM | As per table 1.6.4                                               |
|                                       | 23780 ~ 23800     | 23780, 23710, 23800 | 10 MHz            |             |                                                                  |

**NOTE:**

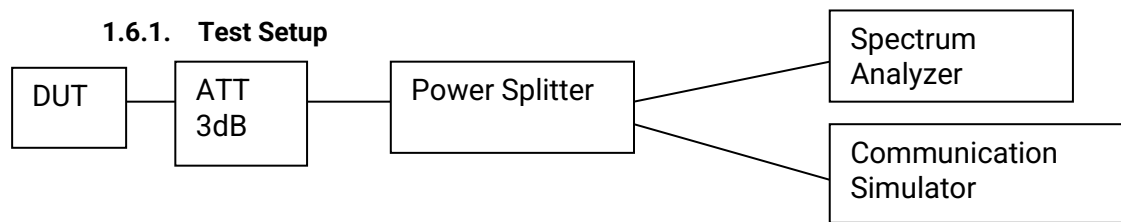
1. The Conducted RF Output Power for QPSK and 16QAM, measured value of QPSK mode is higher than 16QAM mode. Therefore, Conducted Spurious Emission and Radiated Emission had been tested under QPSK modes.
2. Band Edge was performed with 1 and full Resource Block at the lowest and highest operating frequency band.
3. The Effective Radiated Power (ERP) was performed based on worst case mode from Conducted RF Output Power in QPSK and 16QAM modulation.
4. The Peak to Average and Occupied Bandwidth were performed with full Resource Block which is the worst case.
5. Frequency stability was performed with full Resource Block in QPSK modulation.

**Test Condition:**

| Test Item                             | Environmental Conditions | Input Power | Tested By    |
|---------------------------------------|--------------------------|-------------|--------------|
| Conducted RF Output Power             | 25°C, 50% RH             | 7.5 Vdc     | Nur Amanina  |
| Peak-to-Average Power Ratio           | 25°C, 50% RH             | 7.5 Vdc     | Nur Amanina  |
| Occupied Bandwidth                    | 25°C, 50% RH             | 7.5 Vdc     | Nur Amanina  |
| Frequency Stability                   | -30°C ~ 60°C             | 7.5 Vdc     | Nur Amanina  |
| Band Edge Conducted Spurious Emission | 25°C, 50% RH             | 7.5 Vdc     | Nur Amanina  |
| Conducted Spurious Emission           | 25°C, 50% RH             | 7.5 Vdc     | Nur Amanina  |
| Radiated Spurious Emission            | 23.4°C, 68.6% RH         | 7.5 Vdc     | Rezza & Fuad |
| Effective Radiated Power (ERP)        | 25°C, 50% RH             | 7.5 Vdc     | Nur Amanina  |

## 1.6. Conducted RF Output Power

### 1.6.1. Test Setup



1. The DUT transmitter output port was connected to communication simulator with above setup.
2. Path loss for the measurement included.
3. Set DUT to transmit maximum power through communication simulator
4. All the measurement was done at low, mid, high channel for each band and different modulation.
5. Record the average power into the test report.

### 1.6.2. Test Limits

FCC: Portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.

ISED: The e.r.p. shall not exceed 3 watts for portable equipment and indoor fixed subscriber equipment.

### 1.6.3. Conducted RF Output Power – LTE Band 17 (704-716MHz)

| Conducted Output Power (dBm) |         |           |                 |          |          |                  |          |          |
|------------------------------|---------|-----------|-----------------|----------|----------|------------------|----------|----------|
| LTE Band/BW                  | RB Size | RB Offset | QPSK Modulation |          |          | 16QAM Modulation |          |          |
|                              |         |           | Low CH          | Mid CH   | High CH  | Low CH           | Mid CH   | High CH  |
|                              |         |           | 23755           | 23790    | 23825    | 23755            | 23790    | 23825    |
|                              |         |           | 706.5MHz        | 710.0MHz | 713.5MHz | 706.5MHz         | 710.0MHz | 713.5MHz |
| Band 17 / 5MHz               | 1       | 0         | 23.416          | 23.354   | 23.37    | 22.629           | 22.548   | 22.484   |
|                              | 1       | 13        | 23.482          | 23.428   | 23.413   | 22.694           | 22.628   | 22.552   |
|                              | 1       | 24        | 23.427          | 23.363   | 23.316   | 22.63            | 22.559   | 22.453   |
|                              | 12      | 0         | 22.397          | 22.376   | 22.311   | 21.424           | 21.404   | 21.336   |
|                              | 12      | 6         | 22.497          | 22.396   | 22.313   | 21.505           | 21.428   | 21.346   |
|                              | 12      | 13        | 22.459          | 22.426   | 22.335   | 21.467           | 21.468   | 21.364   |
|                              | 25      | 0         | 22.466          | 22.365   | 22.288   | 21.485           | 21.391   | 21.309   |

| Conducted Output Power (dBm) |         |           |                 |          |          |                  |          |          |
|------------------------------|---------|-----------|-----------------|----------|----------|------------------|----------|----------|
| LTE Band/BW                  | RB Size | RB Offset | QPSK Modulation |          |          | 16QAM Modulation |          |          |
|                              |         |           | Low CH          | Mid CH   | High CH  | Low CH           | Mid CH   | High CH  |
|                              |         |           | 23780           | 23790    | 23800    | 23780            | 23790    | 23800    |
|                              |         |           | 709.0MHz        | 710.0MHz | 711.0MHz | 709.0MHz         | 710.0MHz | 711.0MHz |
| Band 17 / 10MHz              | 1       | 0         | 23.367          | 23.37    | 23.375   | 22.598           | 22.506   | 22.49    |
|                              | 1       | 25        | 23.431          | 23.439   | 23.453   | 22.653           | 22.581   | 22.578   |
|                              | 1       | 49        | 23.4            | 23.395   | 23.346   | 22.615           | 22.521   | 22.453   |
|                              | 25      | 0         | 22.419          | 22.409   | 22.415   | 21.448           | 21.435   | 21.425   |
|                              | 25      | 13        | 22.503          | 22.416   | 22.503   | 21.532           | 21.435   | 21.519   |
|                              | 25      | 25        | 22.462          | 22.457   | 22.435   | 21.501           | 21.48    | 21.475   |
|                              | 50      | 0         | 22.493          | 22.408   | 22.403   | 21.51            | 21.434   | 21.43    |

#### 1.6.4. Effective Radiated Power – LTE Band 17 (704-716MHz)

| ERP (dBm)      |         |           |                 |          |          |                  |          |          |
|----------------|---------|-----------|-----------------|----------|----------|------------------|----------|----------|
| LTE Band/BW    | RB Size | RB Offset | QPSK Modulation |          |          | 16QAM Modulation |          |          |
|                |         |           | Low CH          | Mid CH   | High CH  | Low CH           | Mid CH   | High CH  |
|                |         |           | 23755           | 23790    | 23825    | 23755            | 23790    | 23825    |
|                |         |           | 706.5MHz        | 710.0MHz | 713.5MHz | 706.5MHz         | 710.0MHz | 713.5MHz |
| Band 17 / 5MHz | 1       | 0         | 21.266          | 21.204   | 21.22    | 20.479           | 20.398   | 20.334   |
|                | 1       | 13        | 21.332          | 21.278   | 21.263   | 20.544           | 20.478   | 20.402   |
|                | 1       | 24        | 21.277          | 21.213   | 21.166   | 20.48            | 20.409   | 20.303   |
|                | 12      | 0         | 20.247          | 20.226   | 20.161   | 19.274           | 19.254   | 19.186   |
|                | 12      | 6         | 20.347          | 20.246   | 20.163   | 19.355           | 19.278   | 19.196   |
|                | 12      | 13        | 20.309          | 20.276   | 20.185   | 19.317           | 19.318   | 19.214   |
|                | 25      | 0         | 20.316          | 20.215   | 20.138   | 19.335           | 19.241   | 19.159   |

| ERP (dBm)       |         |           |                 |          |          |                  |          |          |
|-----------------|---------|-----------|-----------------|----------|----------|------------------|----------|----------|
| LTE Band/BW     | RB Size | RB Offset | QPSK Modulation |          |          | 16QAM Modulation |          |          |
|                 |         |           | Low CH          | Mid CH   | High CH  | Low CH           | Mid CH   | High CH  |
|                 |         |           | 23780           | 23790    | 23800    | 23780            | 23790    | 23800    |
|                 |         |           | 709.0MHz        | 710.0MHz | 711.0MHz | 709.0MHz         | 710.0MHz | 711.0MHz |
| Band 17 / 10MHz | 1       | 0         | 21.217          | 21.22    | 21.225   | 20.448           | 20.356   | 20.34    |
|                 | 1       | 25        | 21.281          | 21.289   | 21.303   | 20.503           | 20.431   | 20.428   |
|                 | 1       | 49        | 21.25           | 21.245   | 21.196   | 20.465           | 20.371   | 20.303   |
|                 | 25      | 0         | 20.269          | 20.259   | 20.265   | 19.298           | 19.285   | 19.275   |
|                 | 25      | 13        | 20.353          | 20.266   | 20.353   | 19.382           | 19.285   | 19.369   |
|                 | 25      | 25        | 20.312          | 20.307   | 20.285   | 19.351           | 19.33    | 19.325   |
|                 | 50      | 0         | 20.343          | 20.258   | 20.253   | 19.36            | 19.284   | 19.28    |

The maximum ERP/EIRP from the measured RF output power is given in Equation as follows:

$$\text{EIRP} = \text{PMeas} + \text{GT}$$

$$\text{ERP} = \text{EIRP} - 2.15$$

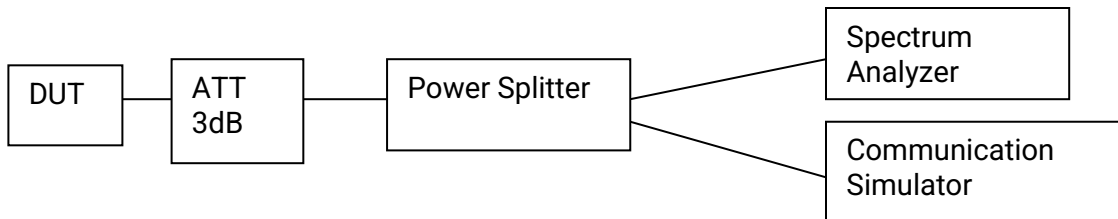
Where, ERP or EIRP effective radiated power or equivalent isotropically radiated power, respectively (Expressed in the same units as PMeas, e.g., dBm)

**PMeas** measured transmitter output power, in dBm

**GT** gain of the transmitting antenna, in dBi (EIRP)

## 1.7. Peak-to-Average Power Ratio

### 1.7.1. Test Setup



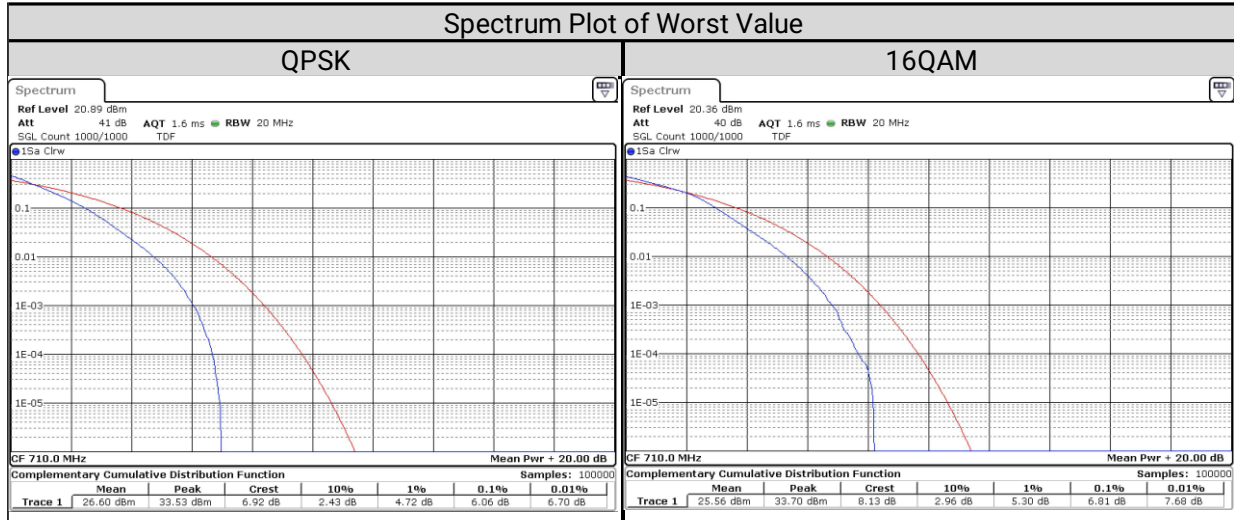
1. The DUT transmitter output port was connected to communication simulator with above setup.
2. Path loss for the measurement included.
3. Set DUT to transmit maximum power through communication simulator
4. Set the CCDF (Complementary Cumulative Distribution Function) option in the spectrum analyzer.
5. Spectrum Analyzer setting, RBW = 20MHz.
6. Recorded the maximum PAR level associated with a probability of 0.1% as Peak to Average Ratio.
7. All the measurement was done at low, mid, high channel for each band and different modulation.

### 1.7.2. Test Limit

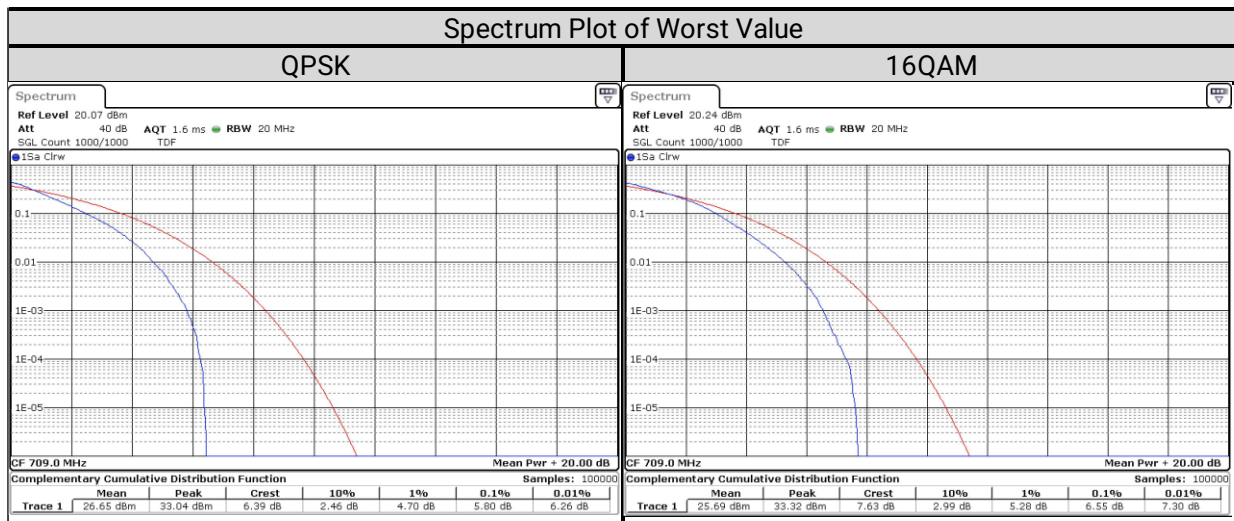
In measuring transmissions in this band using an average power technique, the peak-to-average ratio (PAR) of the transmission may not exceed 13 dB.

### 1.7.3. Peak-to-Average Power Ratio – LTE Band 17 (704-716MHz)

| LTE Band/BW/RB Size/RB Offset | Channel Number | Tx Frequency | Peak To Average (dB) |                  |
|-------------------------------|----------------|--------------|----------------------|------------------|
|                               |                |              | QPSK Modulation      | 16QAM Modulation |
| <b>Band 17/5MHz/25/0</b>      | Low CH 23755   | 706.5 MHz    | 5.681                | 6.522            |
|                               | Mid CH 23790   | 710 MHz      | <b>6.058</b>         | <b>6.812</b>     |
|                               | High CH 23825  | 713.5 MHz    | 5.304                | 6.116            |

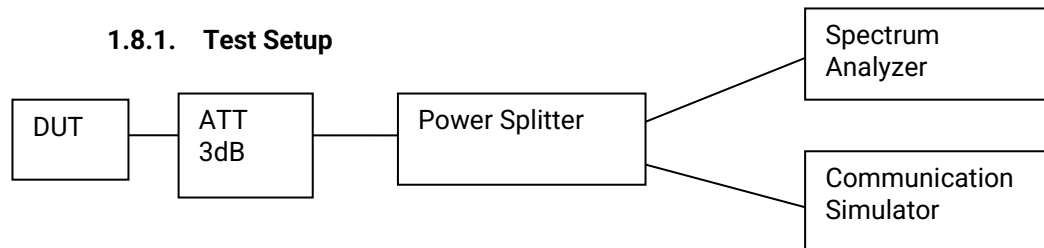


| LTE Band/BW/RB Size/RB Offset | Channel Number | Tx Frequency | Peak To Average (dB) |                  |
|-------------------------------|----------------|--------------|----------------------|------------------|
|                               |                |              | QPSK Modulation      | 16QAM Modulation |
| <b>Band 17/10MHz/50/0</b>     | Low CH 23780   | 709 MHz      | <b>5.797</b>         | <b>6.551</b>     |
|                               | Mid CH 23790   | 710 MHz      | 5.594                | 6.522            |
|                               | High CH 23800  | 711 MHz      | 5.507                | 6.435            |



## 1.8. Occupied Bandwidth

### 1.8.1. Test Setup



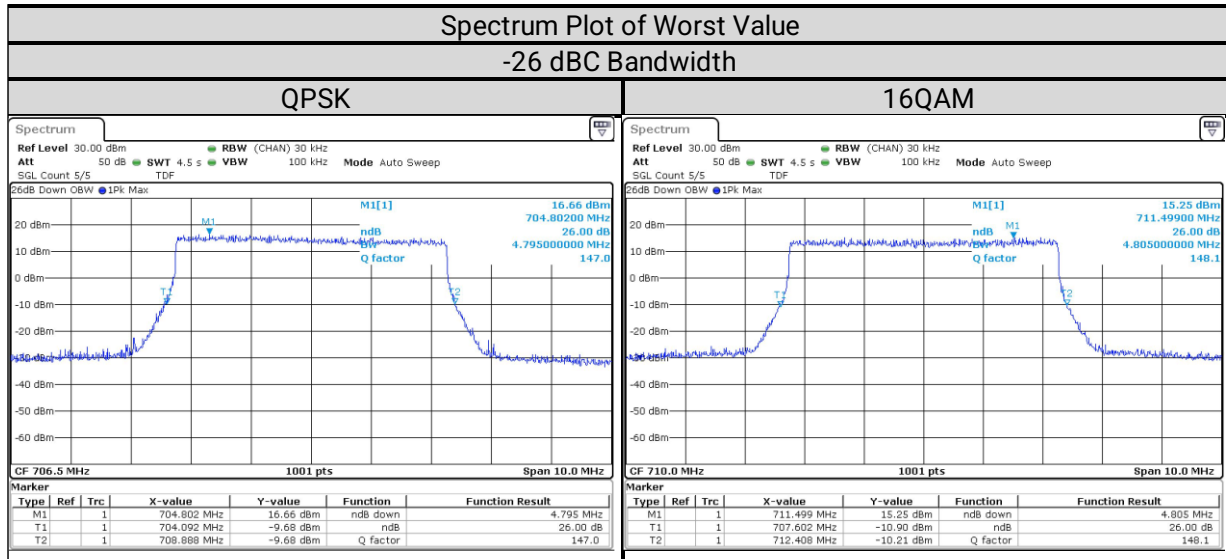
- 1) The DUT transmitter output port was connected to communication simulator with above setup.
- 2) Path loss for the measurement included.
- 3) For LTE measurement, set DUT to transmit maximum power & full RB size through communication simulator.
- 4) For LTE measurement, set DUT to transmit maximum power through communication simulator.
- 5) Spectrum Analyzer setting, RBW is 1% of OBW and VBW is 3 times of RBW.
- 6) Measure & record -26dBc and 99% occupied bandwidth (BW).
- 7) All the measurement was done at low, mid, high channel for each band and different modulation.

### 1.8.2. Test Limit

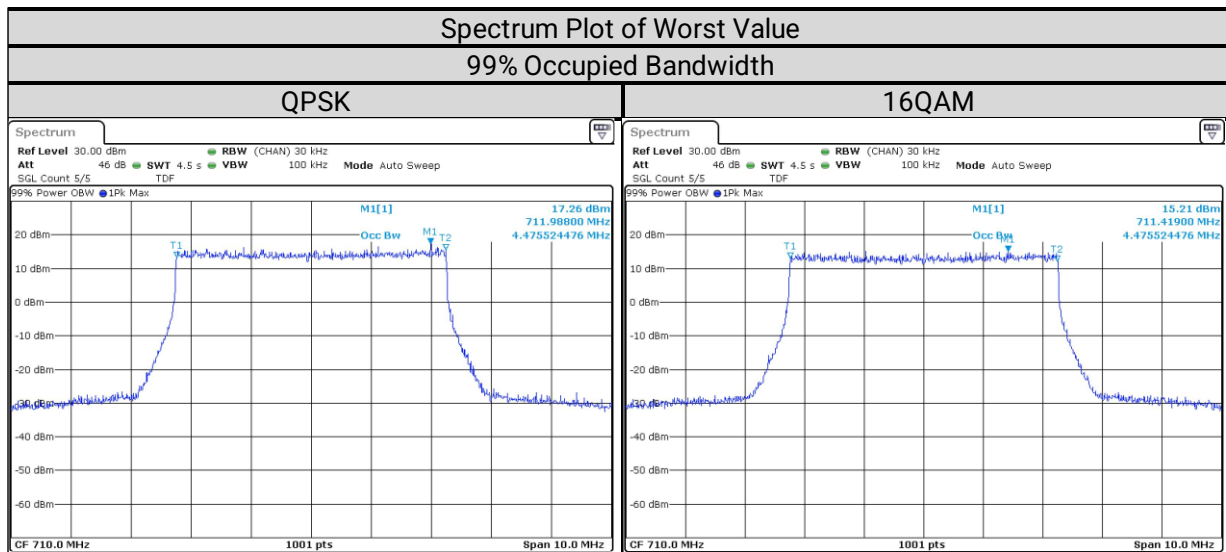
For measurement 99% of occupied bandwidth that is required by FCC 2.1046 and RSS Gen 6.7.

### 1.8.3. Occupied Bandwidth – LTE Band 17 (704-716MHz)

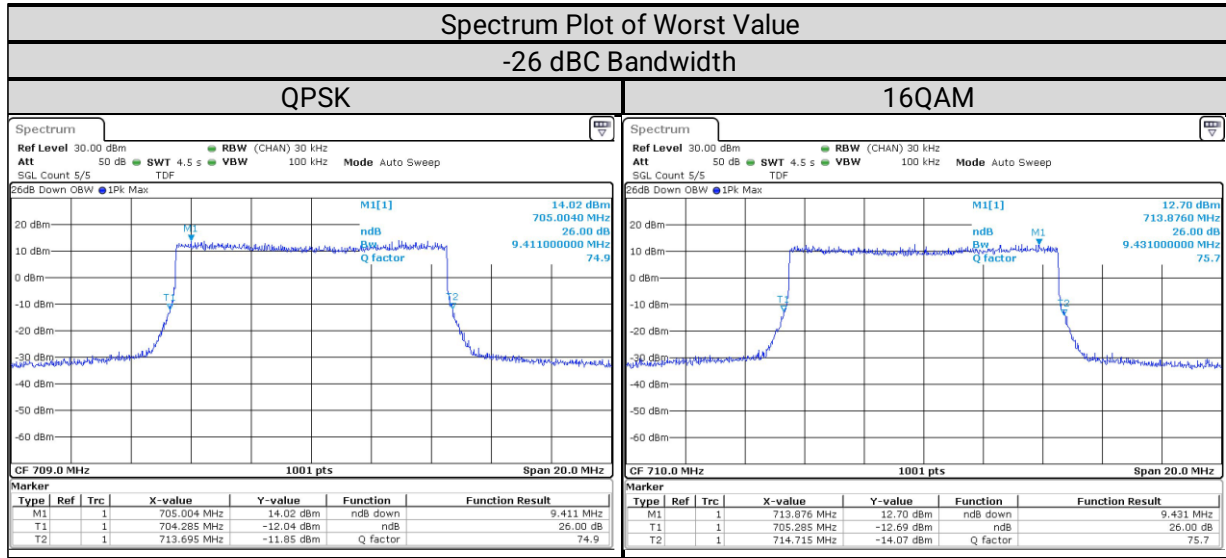
| LTE Band/BW/RB Size/RB Offset | Channel Number | Tx Frequency | -26 dBc Bandwidth (MHz) |                  |
|-------------------------------|----------------|--------------|-------------------------|------------------|
|                               |                |              | QPSK Modulation         | 16QAM Modulation |
| Band 17/5MHz/25/0             | Low CH 23755   | 706.5 MHz    | 4.795                   | 4.795            |
|                               | Mid CH 23790   | 710 MHz      | 4.785                   | 4.805            |
|                               | High CH 23825  | 713.5 MHz    | 4.785                   | 4.785            |



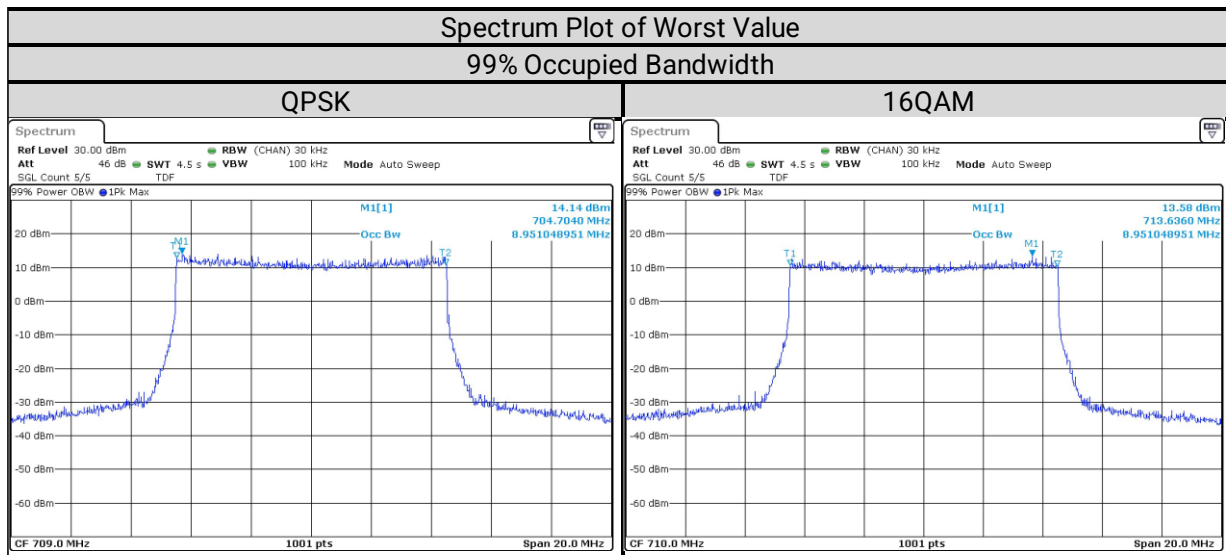
| LTE Band/BW/RB Size/RB Offset | Channel Number | Tx Frequency | 99% Occupied Bandwidth (MHz) |                  |
|-------------------------------|----------------|--------------|------------------------------|------------------|
|                               |                |              | QPSK Modulation              | 16QAM Modulation |
| Band 17/5MHz/25/0             | Low CH 23755   | 706.5 MHz    | 4.466                        | 4.466            |
|                               | Mid CH 23790   | 710 MHz      | 4.476                        | 4.476            |
|                               | High CH 23825  | 713.5 MHz    | 4.456                        | 4.456            |



| LTE Band/BW/RB<br>Size/RB Offset | Channel Number | Tx<br>Frequency | -26 dBc Bandwidth (MHz) |                  |
|----------------------------------|----------------|-----------------|-------------------------|------------------|
|                                  |                |                 | QPSK Modulation         | 16QAM Modulation |
| <b>Band<br/>17/10MHz/50/0</b>    | Low CH 23780   | 709 MHz         | <b>9.411</b>            | 9.351            |
|                                  | Mid CH 23790   | 710 MHz         | 9.331                   | <b>9.431</b>     |
|                                  | High CH 23800  | 711 MHz         | 9.311                   | 9.331            |

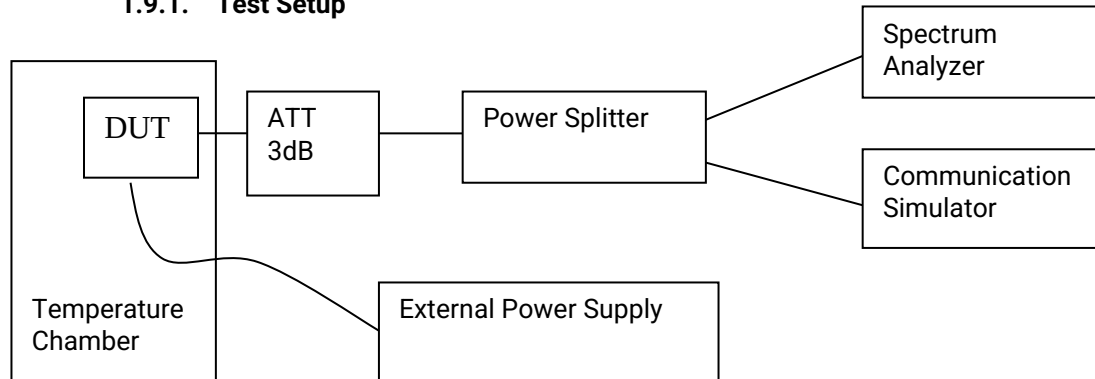


| LTE Band/BW/RB<br>Size/RB Offset | Channel Number | Tx<br>Frequency | 99% Occupied Bandwidth (MHz) |                  |
|----------------------------------|----------------|-----------------|------------------------------|------------------|
|                                  |                |                 | QPSK Modulation              | 16QAM Modulation |
| <b>Band<br/>17/10MHz/50/0</b>    | Low CH 23780   | 709 MHz         | <b>8.951</b>                 | 8.931            |
|                                  | Mid CH 23790   | 710 MHz         | 8.931                        | <b>8.951</b>     |
|                                  | High CH 23800  | 711 MHz         | 8.911                        | 8.911            |



## 1.9. Frequency Stability

### 1.9.1. Test Setup



- 1) The DUT is placed in the temperature chamber and DUT is power up by external power supply to control the DC input voltage.
- 2) The temperature chamber could control the temperature and humidity and external power supply could control the test voltage range from minimum to maximum operating voltage.
- 3) Measured frequency error from the communication simulator by vary below step :
  - i. Vary temperature of the temperature chamber from -30 ~ 60 deg C (10 deg C / Step) and set external supply voltage constant at nominal voltage.
  - ii. Vary external supply voltage from minimum to maximum operation voltage support by DUT and set temperature chamber constant at room temp.
- 4) All the measurement was done at mid channel for each band.

### 1.9.2. Test Limit

As per manufacturer declared product operating at -30 to 60 deg C with spec of +/- 0.1ppm.

### 1.9.3. Frequency Stability – LTE Band 17 (704-716MHz)

| Band           | Temp<br>( Deg C) | Frequency Error VS Temperature |                       |                 |                       |
|----------------|------------------|--------------------------------|-----------------------|-----------------|-----------------------|
|                |                  | Channel Bandwidth: 5 MHz       |                       |                 |                       |
|                |                  | Low Channel                    |                       | High Channel    |                       |
|                |                  | 706.5MHz                       |                       | 713.5MHz        |                       |
| LTE Band<br>17 |                  | Frequency (MHz)                | Frequency Error (ppm) | Frequency (MHz) | Frequency Error (ppm) |
|                | 60               | 706.5000036                    | -0.004718             | 713.5000512     | -0.00401              |
|                | 50               | 706.5006666                    | 0.007601              | 713.5000546     | 0.007148              |
|                | 40               | 706.5008456                    | 0.007006              | 713.5004659     | 0.00761               |
|                | 30               | 706.5000954                    | 0.005166              | 713.5004156     | -0.00392              |
|                | 20               | 706.5008599                    | 0.008068              | 713.5006556     | 0.007582              |
|                | 10               | 706.5006326                    | 0.008719              | 713.5007458     | 0.005326              |
|                | 0                | 706.5001258                    | 0.007445              | 713.5000855     | -0.00488              |
|                | -10              | 706.5000846                    | 0.006638              | 713.5000954     | 0.006461              |
|                | -20              | 706.5000845                    | 0.005715              | 713.5000895     | 0.006359              |
|                | -30              | 706.5000515                    | 0.005661              | 713.5000856     | 0.006127              |

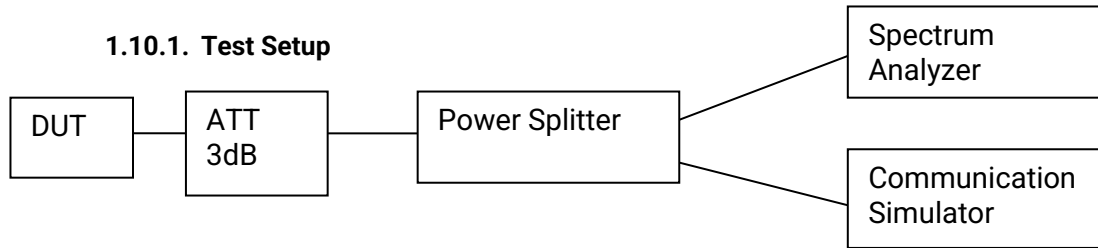
| Band           | Voltage<br>(V) | Frequency Error VS Voltage |                       |                 |                       |
|----------------|----------------|----------------------------|-----------------------|-----------------|-----------------------|
|                |                | Channel Bandwidth: 5 MHz   |                       |                 |                       |
|                |                | Low Channel                |                       | High Channel    |                       |
|                |                | 706.5MHz                   |                       | 713.5MHz        |                       |
| LTE Band<br>17 |                | Frequency (MHz)            | Frequency Error (ppm) | Frequency (MHz) | Frequency Error (ppm) |
|                | 9              | 706.5000366                | 0.004029              | 713.5000229     | 0.005052              |
|                | 7.5            | 706.5000415                | 0.006325              | 713.5003267     | 0.008418              |
|                | 6              | 706.5000815                | -0.005708             | 713.5008144     | 0.007477              |

| Band           | Temp<br>( Deg C) | Frequency Error VS Temperature |                       |                 |                       |
|----------------|------------------|--------------------------------|-----------------------|-----------------|-----------------------|
|                |                  | Channel Bandwidth: 10 MHz      |                       |                 |                       |
|                |                  | Low Channel                    |                       | High Channel    |                       |
|                |                  | 709MHz                         |                       | 711MHz          |                       |
| LTE<br>Band 17 |                  | Frequency (MHz)                | Frequency Error (ppm) | Frequency (MHz) | Frequency Error (ppm) |
|                | 60               | 709.0000361                    | -0.004822             | 711.0000336     | 0.00338               |
|                | 50               | 709.0003671                    | 0.006037              | 711.0006516     | 0.004233              |
|                | 40               | 709.0008145                    | 0.004697              | 711.0009599     | -0.00356              |
|                | 30               | 709.0008456                    | 0.005543              | 711.0008155     | 0.00571               |
|                | 20               | 709.0000559                    | 0.003315              | 711.0003223     | -0.00494              |
|                | 10               | 709.0000999                    | 0.005331              | 711.0003263     | -0.0044               |
|                | 0                | 709.0008951                    | 0.005614              | 711.0006666     | -0.00435              |
|                | -10              | 709.0008459                    | 0.005994              | 711.0000321     | 0.005359              |
|                | -20              | 709.0006255                    | 0.006183              | 711.0003256     | 0.006406              |
|                | -30              | 709.0006543                    | 0.004625              | 711.0004156     | 0.00557               |

| Band           | Voltage<br>(V) | Frequency Error VS Voltage |                       |                 |                       |
|----------------|----------------|----------------------------|-----------------------|-----------------|-----------------------|
|                |                | Channel Bandwidth: 10 MHz  |                       |                 |                       |
|                |                | Low Channel                |                       | High Channel    |                       |
|                |                | 709MHz                     |                       | 711MHz          |                       |
| LTE<br>Band 17 |                | Frequency (MHz)            | Frequency Error (ppm) | Frequency (MHz) | Frequency Error (ppm) |
|                | 9              | 709.0000455                | -0.005044             | 711.0006159     | 0.004306              |
|                | 7.5            | 709.0003666                | 0.027168              | 711.0000448     | 0.004909              |
|                | 6              | 709.0004955                | 0.028967              | 711.0008516     | -0.005991             |

## 1.10. Band Edge Conducted Spurious Emission

### 1.10.1. Test Setup



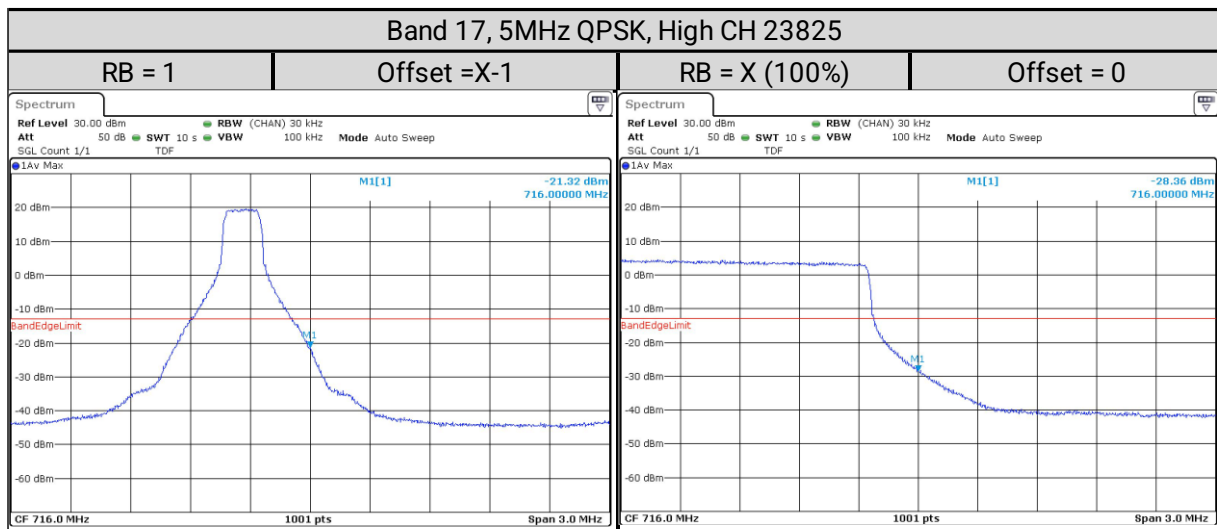
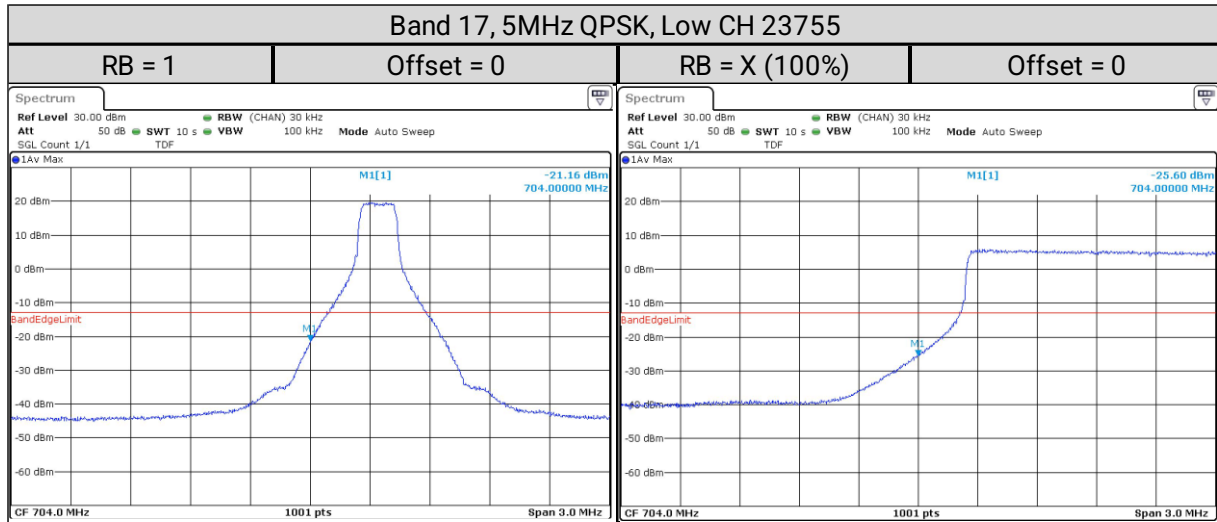
- 1) The DUT transmitter output port was connected to communication simulator with above setup.
- 2) Path loss for the measurement included.
- 3) Set DUT to transmit maximum power through communication simulator.
- 4) The band edges of lowest and highest channels with the highest RF powers were measured.
- 5) The center frequency of spectrum is the band edge frequency, span is 3MHz, RBW is 1~3% of EBW and VBW is at least 3 times of RBW
- 6) Record the maximum trace plot into the test report.

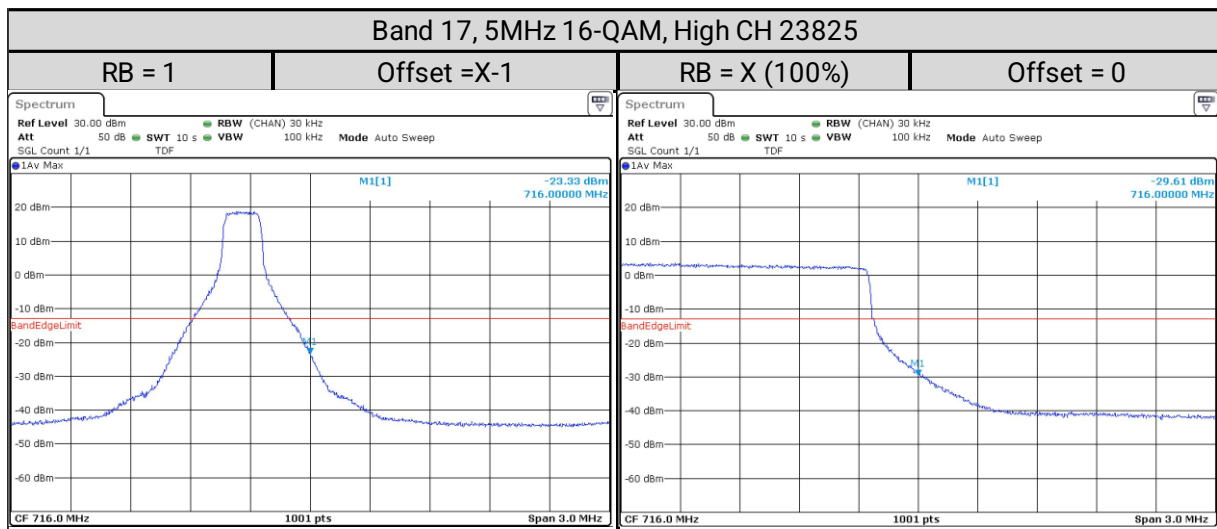
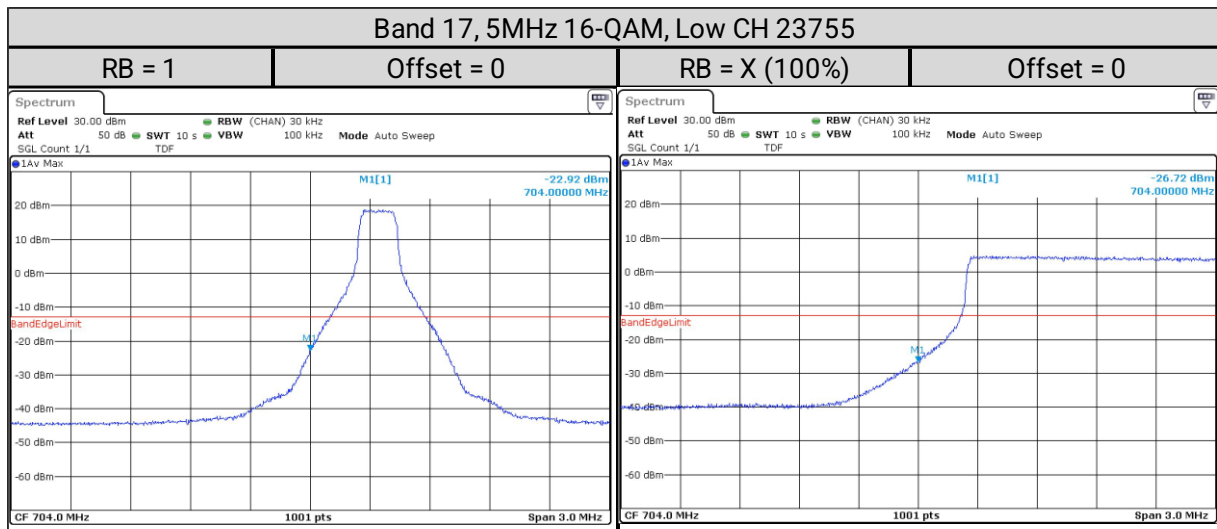
### 1.10.2. Test Limit

For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log (P)$  dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

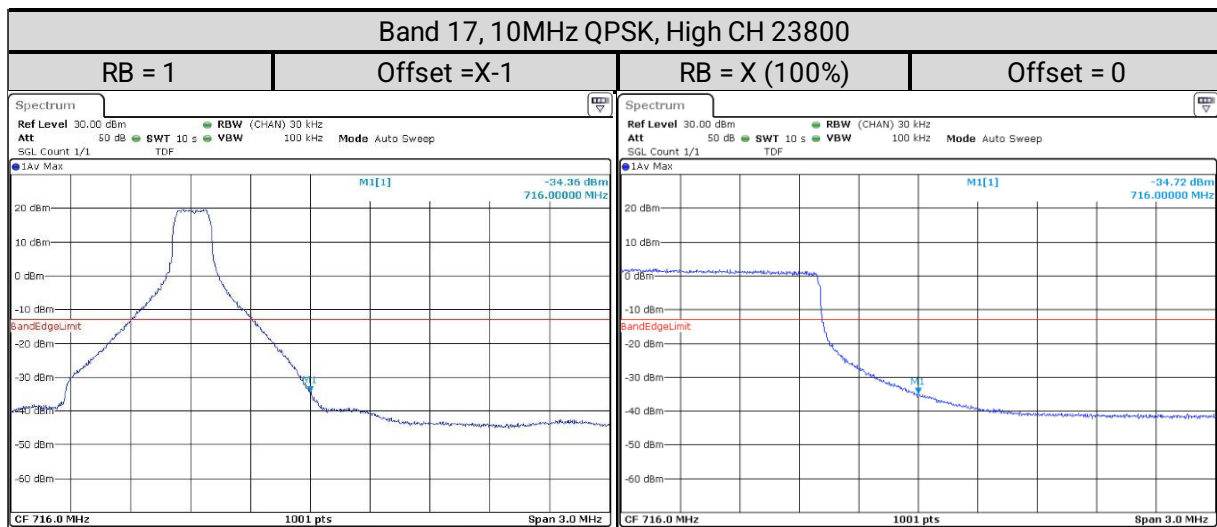
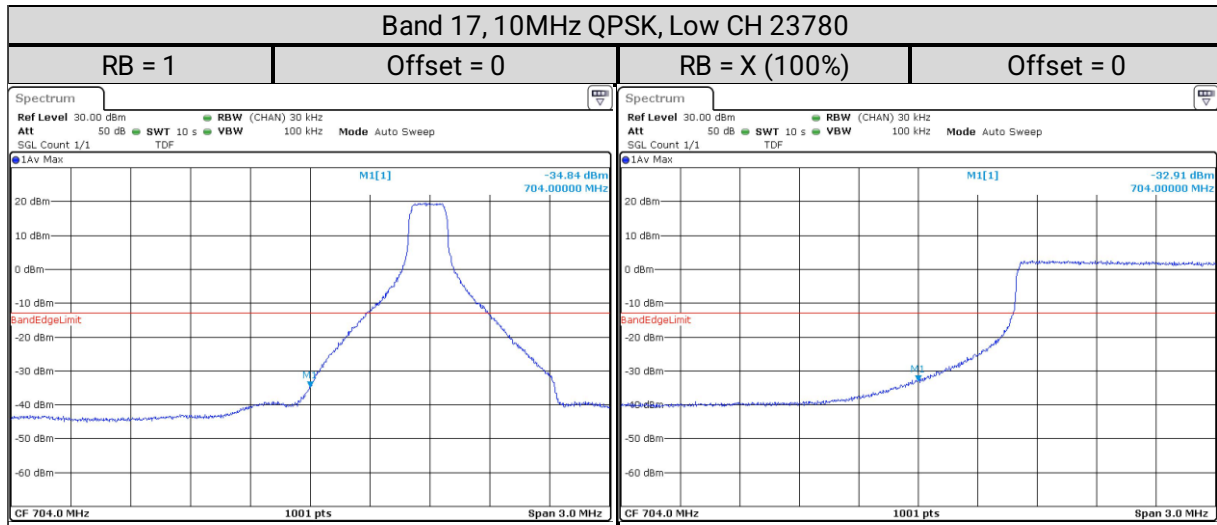
### 1.10.3. Band Edge Conducted Spurious Emission – LTE Band 17 (704-716MHz)

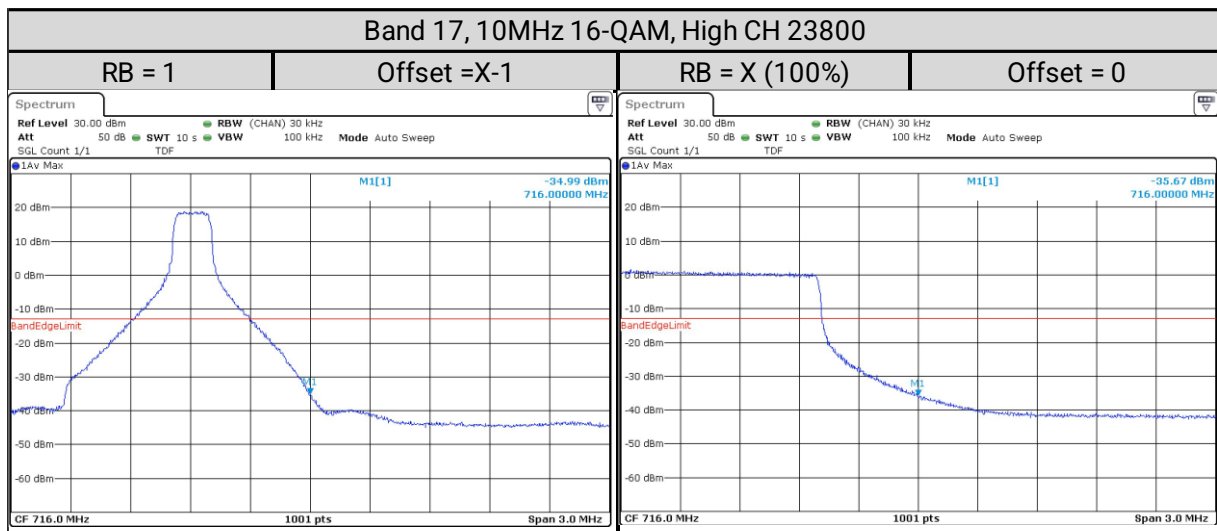
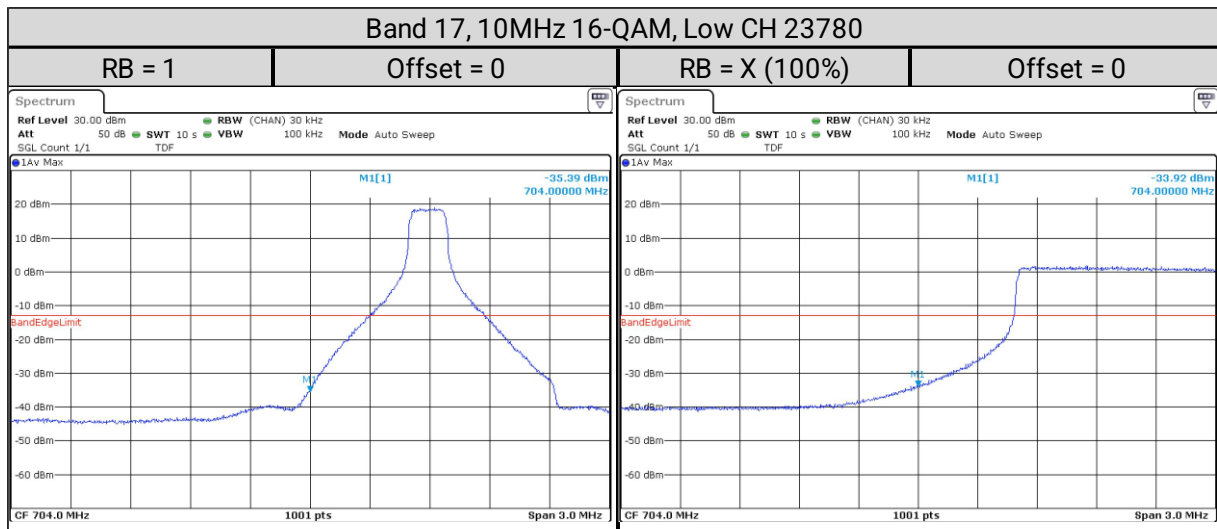
#### 5MHz





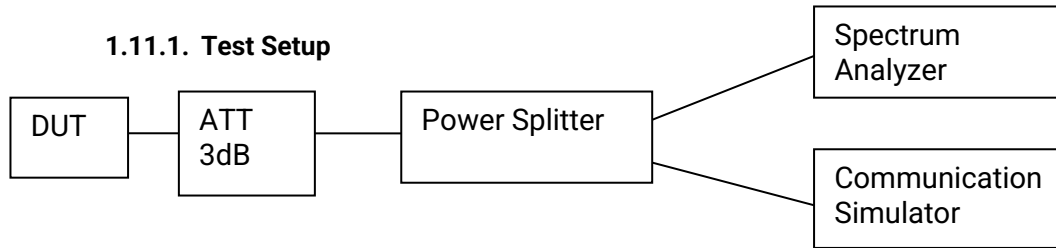
**10MHz**





## 1.11. Conducted Spurious Emission

### 1.11.1. Test Setup



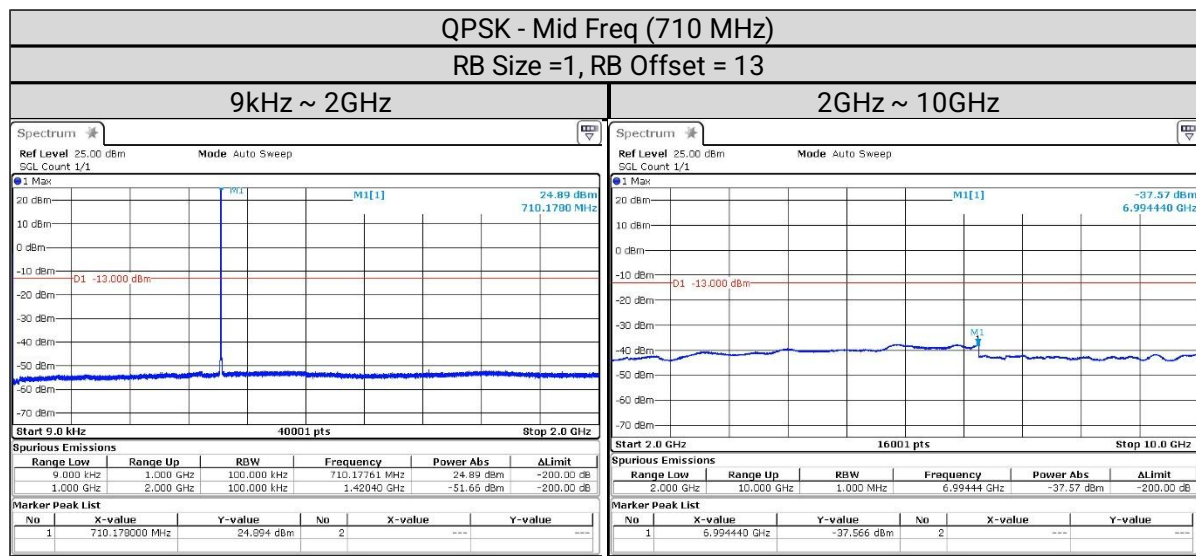
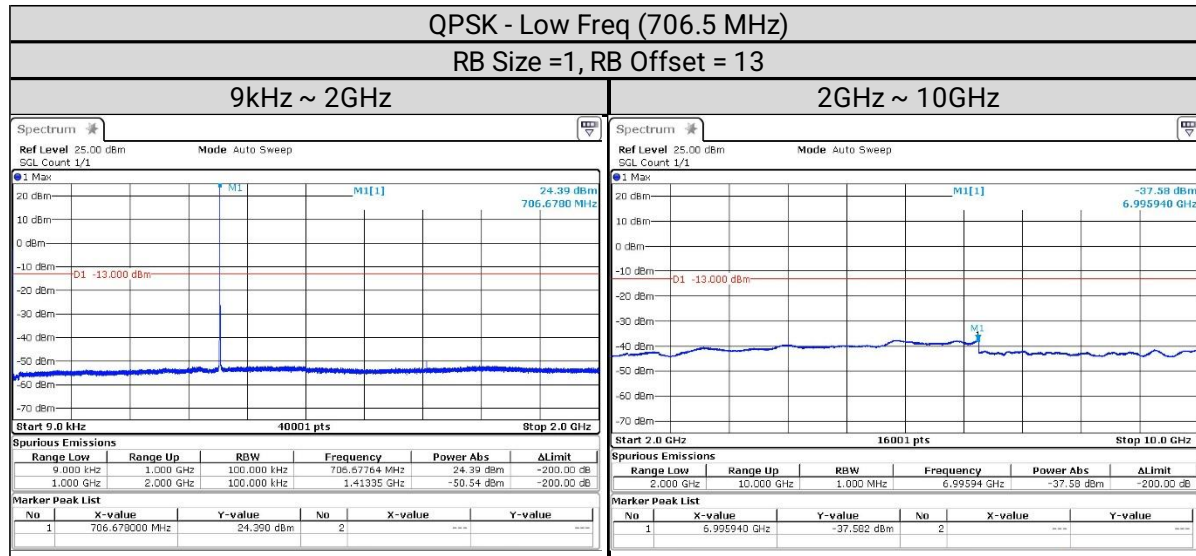
- 1) The DUT transmitter output port was connected to communication simulator with above setup.
- 2) Path loss for the measurement included.
- 3) Set DUT to transmit maximum power through communication simulator.
- 4) Spectrum Analyzer setting, RBW = 1 MHz, VBW = 3 MHz.
- 5) The spurious emission of lowest, middle and highest channels with the highest RF powers were measured.
- 6) Record the maximum trace plot into the test report.

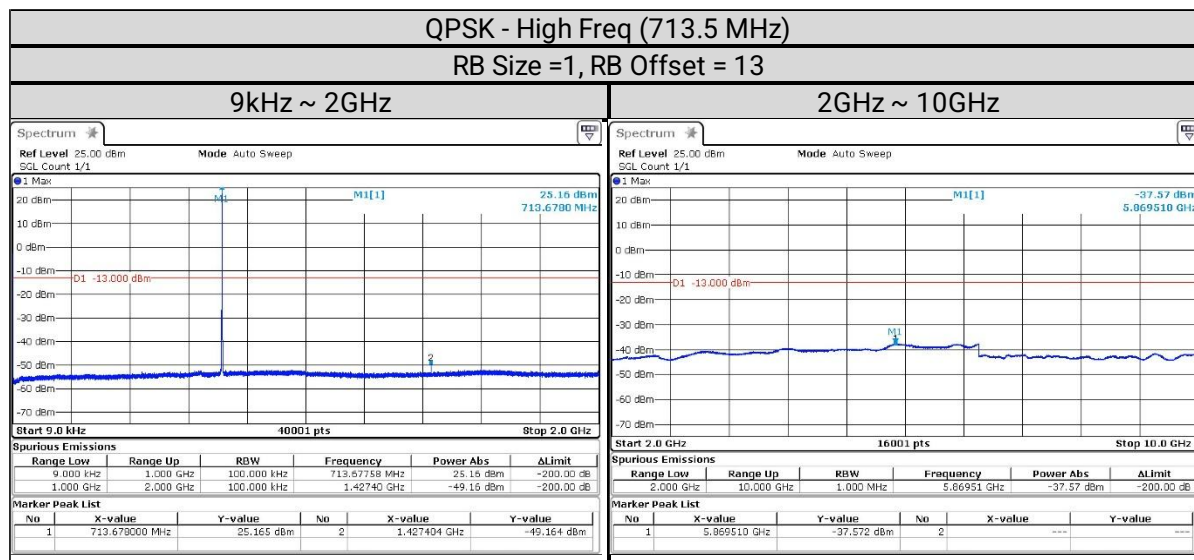
### 1.11.2. Test Limit

For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log (P)$  dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

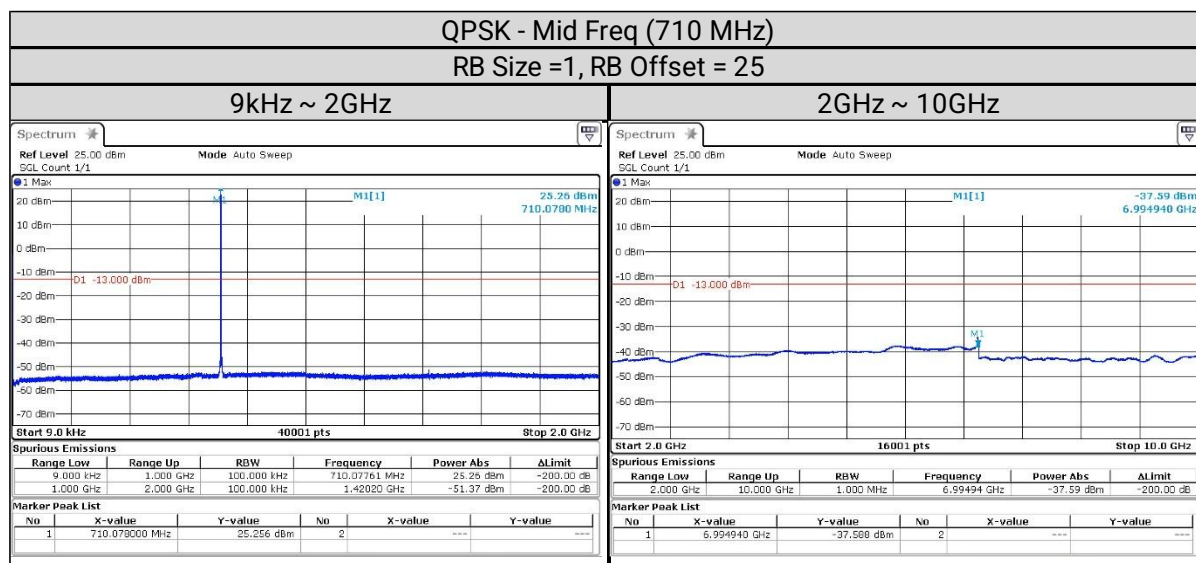
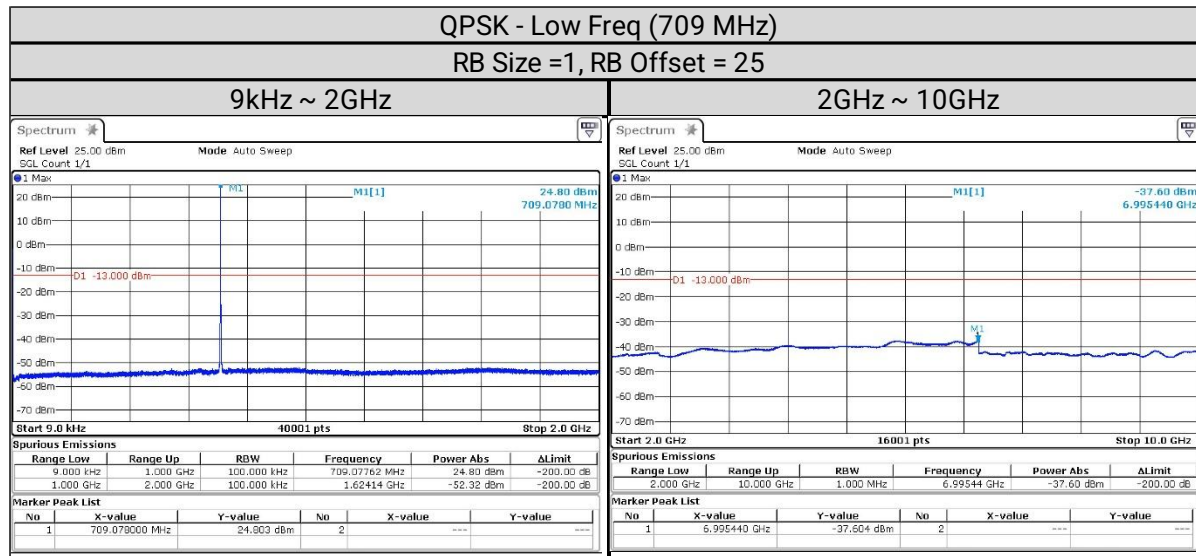
### 1.11.3. Conducted Spurious Emissions – LTE Band 17 (704-716MHz)

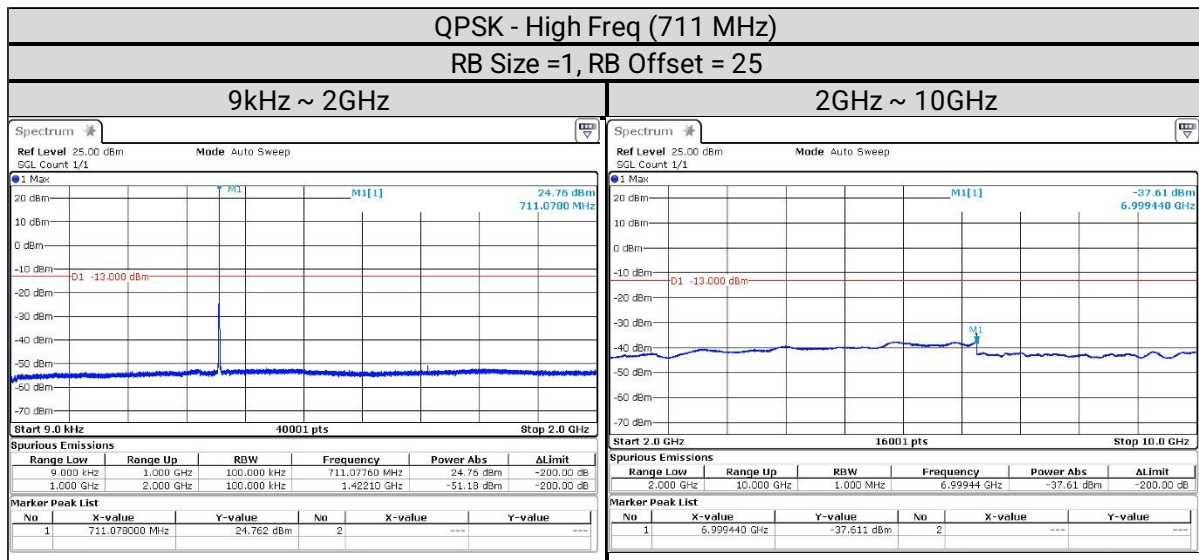
#### 5MHz





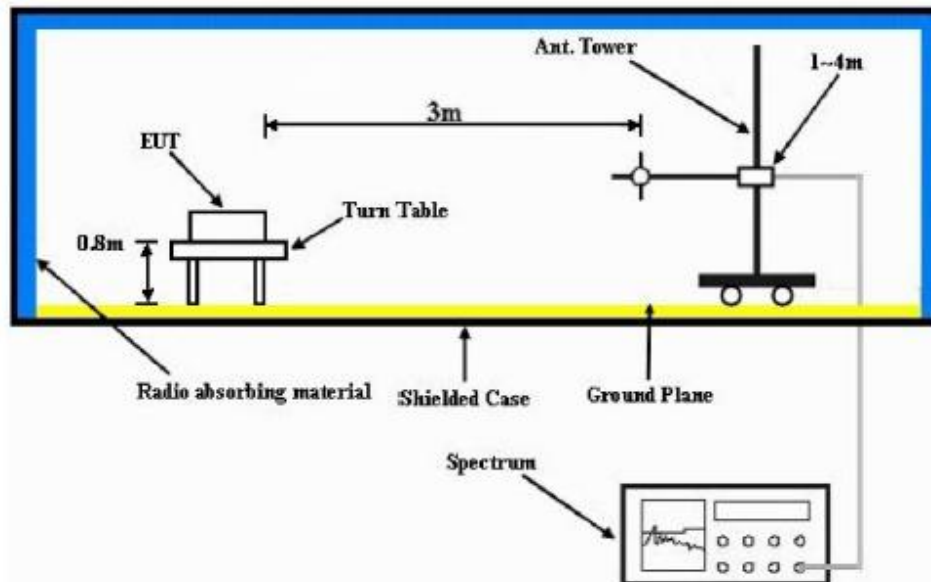
# 10MHz





## 1.12. Radiated Spurious Emission

### 1.12.1. Test Setup



- 1) The spectrum setting for scanning Radiated Emission below 1 GHz is RBW = 100 kHz, VBW = 300 kHz and above 1 GHz is RBW = 1MHz, VBW = 3MHz. Detector mode is positive peak.
- 2) In the semi-anechoic chamber, setup as illustrated above the EUT placed on the Turn Table at 0.8m height for below 1Ghz measurement and at 1.5m height for above 1GHz measurement, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- 3) The substitution antenna is substituted for EUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum radiation power. Record the power level of maximum radiation power from spectrum. So, the measured substitution value = Ref level of S.G + TX cables loss – Substituted Antenna Gain.
- 4) Final Radiated Spurious Emission = "Read Value" + Measured substitution value.

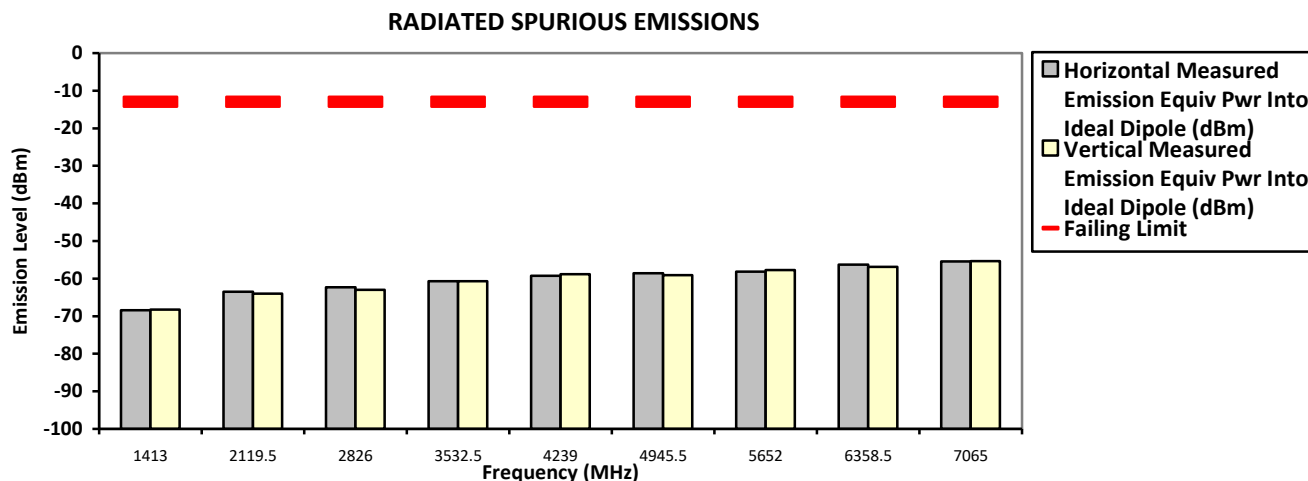
### 1.12.2. Test Limit

For operations in the 600 MHz band and the 698-746 MHz band, the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least  $43 + 10 \log (P)$  dB. Compliance with this provision is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kilohertz or greater. However, in the 100 kilohertz bands immediately outside and adjacent to a licensee's frequency block, a resolution bandwidth of at least 30 kHz may be employed.

### 1.12.3. Radiated Spurious Emission – LTE Band 17 (704-716MHz)

|                                         |                                      |
|-----------------------------------------|--------------------------------------|
| Test: SAC Transmitter Radiated Emission | EMC SR ID: 0875N00-EMC-00083         |
| Model Number: H55TGT9PW8BN              | S/N: 437ZBG0594                      |
| Battery: PMNN4895A                      |                                      |
| Accessory: AN000297A01                  |                                      |
| Test Mode: TX LTE Band 17 (X-Plane)     | Test Frequency: 706.500000 MHz (Low) |
| Channel Bandwidth: 5MHz                 | Power: 0.25119 Watt(s)/Max Power     |

| Frequency (MHz) | Limit    | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|-----------------|----------|----------------------------------------------------------------|--------------------------------------------------------------|
| 1413.0000       | -13.0000 | -68.4291 **                                                    | -68.2826 **                                                  |
| 2119.5000       | -13.0000 | -63.5161 **                                                    | -63.9892 **                                                  |
| 2826.0000       | -13.0000 | -62.2867 **                                                    | -62.9541 **                                                  |
| 3532.5000       | -13.0000 | -60.7261 **                                                    | -60.6856 **                                                  |
| 4239.0000       | -13.0000 | -59.2422 **                                                    | -58.8389 **                                                  |
| 4945.5000       | -13.0000 | -58.6122 **                                                    | -59.1062 **                                                  |
| 5652.0000       | -13.0000 | -58.1695 **                                                    | -57.7049 **                                                  |
| 6358.5000       | -13.0000 | -56.2624 **                                                    | -56.8549 **                                                  |
| 7065.0000       | -13.0000 | -55.4415 **                                                    | -55.3508 **                                                  |



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Rezza & Fuad

Fri, 16 May, 2025

Remarks: \*\* Indicates the spurious emission could not be detected due to noise limitations or ambient.

\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

System MU: 4.03 dB

Temp(Deg): 23.4 Hum(%RH):68.6

Remarks:

Passed Results

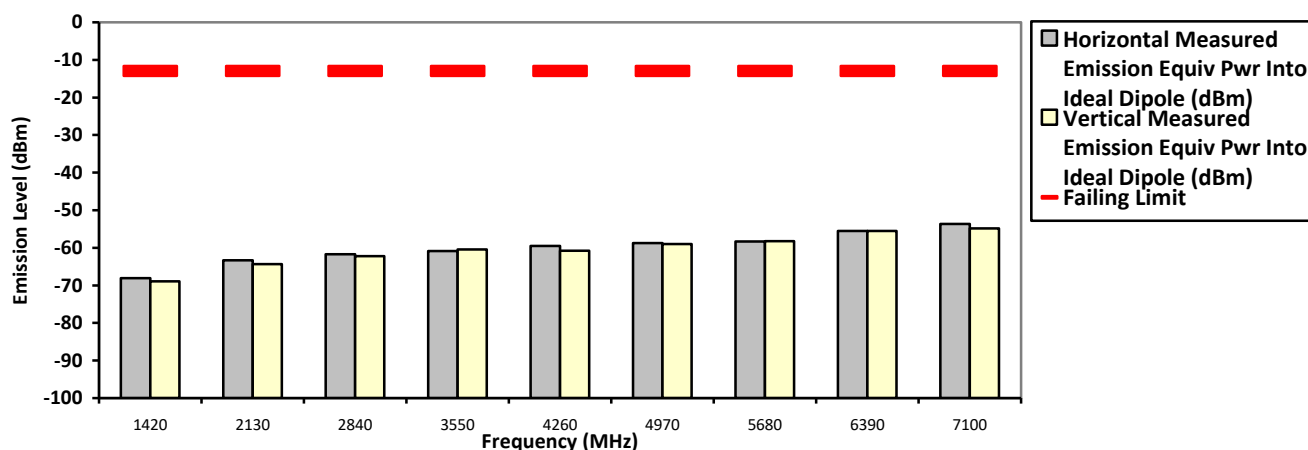
Marginal Results

Failed Results

|                                         |                                      |
|-----------------------------------------|--------------------------------------|
| Test: SAC Transmitter Radiated Emission | EMC SR ID: 0875N00-EMC-00083         |
| Model Number: H55TGT9PW8BN              | S/N: 437ZBG0594                      |
| Battery: PMNN4895A                      |                                      |
| Accessory: AN000297A01                  |                                      |
| Test Mode: TX LTE Band 17 (X-Plane)     | Test Frequency: 710.000000 MHz (Mid) |
| Channel Bandwidth: 10MHz                | Power: 0.25119 Watt(s)/Max Power     |

| Frequency (MHz) | Limit    | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|-----------------|----------|----------------------------------------------------------------|--------------------------------------------------------------|
| 1420.0000       | -13.0000 | -68.0989 **                                                    | -68.9630 **                                                  |
| 2130.0000       | -13.0000 | -63.3558 **                                                    | -64.3211 **                                                  |
| 2840.0000       | -13.0000 | -61.6769 **                                                    | -62.1987 **                                                  |
| 3550.0000       | -13.0000 | -60.8292 **                                                    | -60.4342 **                                                  |
| 4260.0000       | -13.0000 | -59.5423 **                                                    | -60.7837 **                                                  |
| 4970.0000       | -13.0000 | -58.7472 **                                                    | -59.0317 **                                                  |
| 5680.0000       | -13.0000 | -58.3548 **                                                    | -58.2587 **                                                  |
| 6390.0000       | -13.0000 | -55.5526 **                                                    | -55.5305 **                                                  |
| 7100.0000       | -13.0000 | -53.6270 **                                                    | -54.8750 **                                                  |

#### RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Rezza & Fuad

Fri, 16 May, 2025

Remarks: \*\* Indicates the spurious emission could not be detected due to noise limitations or ambient.

\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

System MU: 4.03 dB

Temp(Deg): 23.4 Hum(%RH):68.6

Remarks:

Passed Results

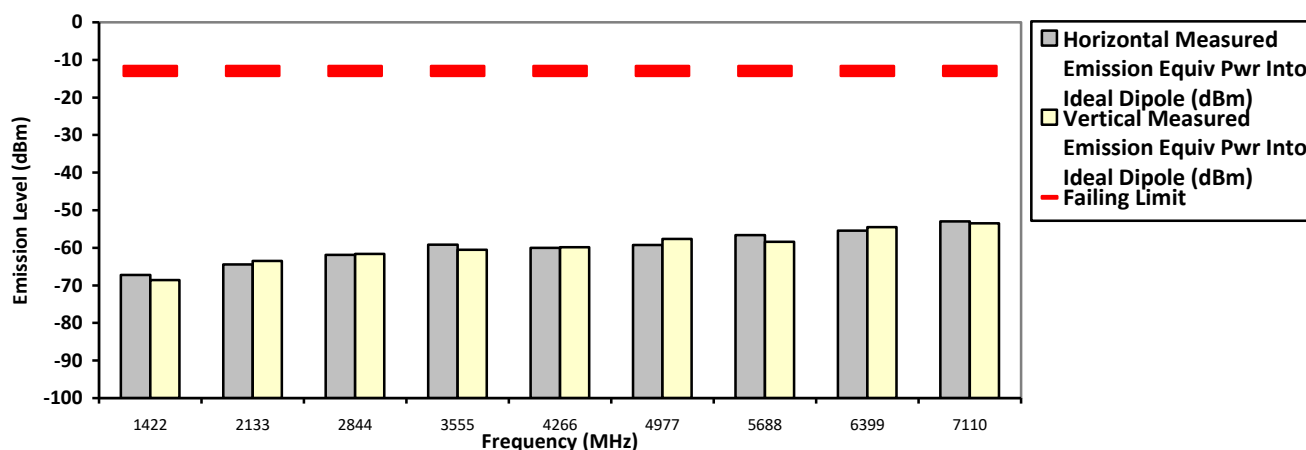
Marginal Results

Failed Results

|                                                |                                              |
|------------------------------------------------|----------------------------------------------|
| <b>Test: SAC Transmitter Radiated Emission</b> | <b>EMC SR ID: 0875N00-EMC-00083</b>          |
| <b>Model Number: H55TGT9PW8BN</b>              | <b>S/N: 437ZBG0594</b>                       |
| <b>Battery: PMNN4895A</b>                      |                                              |
| <b>Accessory: AN000297A01</b>                  |                                              |
| <b>Test Mode: TX LTE Band 17 (X-Plane)</b>     | <b>Test Frequency: 711.000000 MHz (High)</b> |
| <b>Channel Bandwidth: 10MHz</b>                | <b>Power: 0.25119 Watt(s)/Max Power</b>      |

| Frequency (MHz) | Limit    | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|-----------------|----------|----------------------------------------------------------------|--------------------------------------------------------------|
| 1422.0000       | -13.0000 | -67.2586 **                                                    | -68.5862 **                                                  |
| 2133.0000       | -13.0000 | -64.4019 **                                                    | -63.4991 **                                                  |
| 2844.0000       | -13.0000 | -61.8725 **                                                    | -61.6083 **                                                  |
| 3555.0000       | -13.0000 | -59.1755 **                                                    | -60.5381 **                                                  |
| 4266.0000       | -13.0000 | -59.9899 **                                                    | -59.8322 **                                                  |
| 4977.0000       | -13.0000 | -59.2783 **                                                    | -57.6260 **                                                  |
| 5688.0000       | -13.0000 | -56.6494 **                                                    | -58.3775 **                                                  |
| 6399.0000       | -13.0000 | -55.4516 **                                                    | -54.5274 **                                                  |
| 7110.0000       | -13.0000 | -52.9553 **                                                    | -53.4472 **                                                  |

#### RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Rezza & Fuad

Fri, 16 May, 2025

Remarks: \*\* Indicates the spurious emission could not be detected due to noise limitations or ambient.

\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

System MU: 4.03 dB

Temp(Deg): 23.4 Hum(%RH):68.6

Remarks:

Passed Results

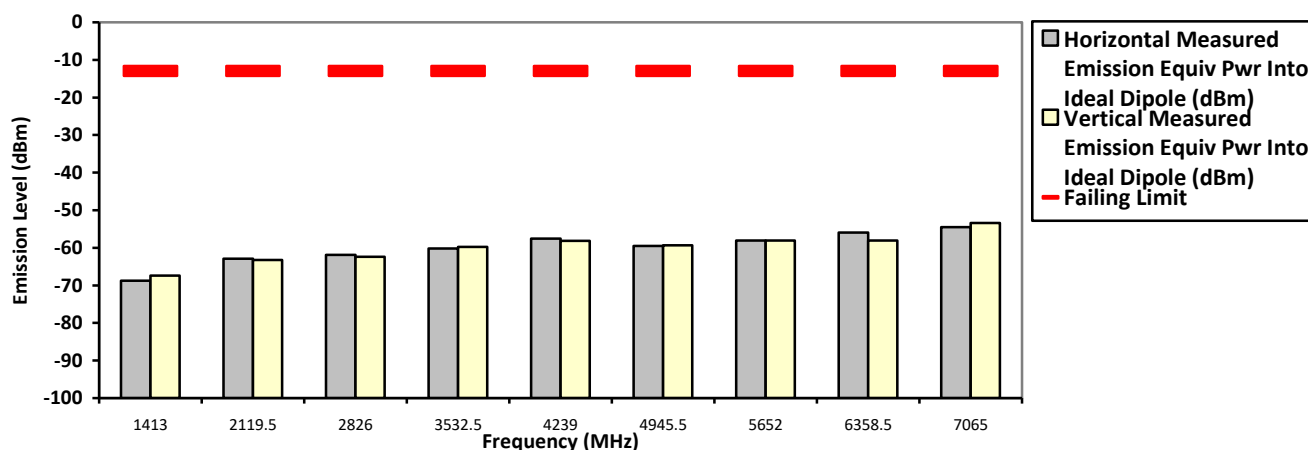
Marginal Results

Failed Results

|                                         |                                      |
|-----------------------------------------|--------------------------------------|
| Test: SAC Transmitter Radiated Emission | EMC SR ID: 0875N00-EMC-00083         |
| Model Number: H55TGT9PW8BN              | S/N: 437ZBG0594                      |
| Battery: PMNN4895A                      |                                      |
| Accessory: AN000297A01                  |                                      |
| Test Mode: TX LTE Band 17 (Y-Plane)     | Test Frequency: 706.500000 MHz (Low) |
| Channel Bandwidth: 5MHz                 | Power: 0.25119 Watt(s)/Max Power     |

| Frequency (MHz) | Limit    | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|-----------------|----------|----------------------------------------------------------------|--------------------------------------------------------------|
| 1413.0000       | -13.0000 | -68.7815 **                                                    | -67.3669 **                                                  |
| 2119.5000       | -13.0000 | -62.8776 **                                                    | -63.2027 **                                                  |
| 2826.0000       | -13.0000 | -61.8441 **                                                    | -62.3807 **                                                  |
| 3532.5000       | -13.0000 | -60.1629 **                                                    | -59.7946 **                                                  |
| 4239.0000       | -13.0000 | -57.5726 **                                                    | -58.1600 **                                                  |
| 4945.5000       | -13.0000 | -59.5276 **                                                    | -59.2990 **                                                  |
| 5652.0000       | -13.0000 | -58.0466 **                                                    | -58.0683 **                                                  |
| 6358.5000       | -13.0000 | -55.9597 **                                                    | -58.0621 **                                                  |
| 7065.0000       | -13.0000 | -54.4770 **                                                    | -53.3606 **                                                  |

#### RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Rezza & Fuad

Fri, 16 May, 2025

Remarks: \*\* Indicates the spurious emission could not be detected due to noise limitations or ambient.

\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

System MU: 4.03 dB

Temp(Deg): 23.4 Hum(%RH):68.6

Remarks:

Passed Results

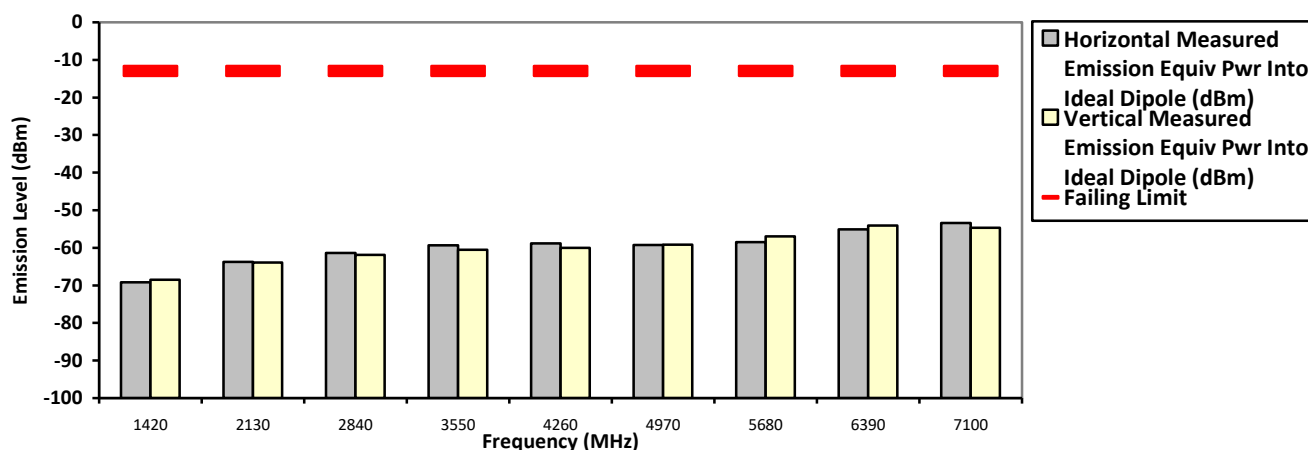
Marginal Results

Failed Results

|                                         |                                      |
|-----------------------------------------|--------------------------------------|
| Test: SAC Transmitter Radiated Emission | EMC SR ID: 0875N00-EMC-00083         |
| Model Number: H55TGT9PW8BN              | S/N: 437ZBG0594                      |
| Battery: PMNN4895A                      |                                      |
| Accessory: AN000297A01                  |                                      |
| Test Mode: TX LTE Band 17 (Y-Plane)     | Test Frequency: 710.000000 MHz (Mid) |
| Channel Bandwidth: 10MHz                | Power: 0.25119 Watt(s)/Max Power     |

| Frequency (MHz) | Limit    | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|-----------------|----------|----------------------------------------------------------------|--------------------------------------------------------------|
| 1420.0000       | -13.0000 | -69.1478 **                                                    | -68.4900 **                                                  |
| 2130.0000       | -13.0000 | -63.7784 **                                                    | -63.9142 **                                                  |
| 2840.0000       | -13.0000 | -61.4113 **                                                    | -61.8774 **                                                  |
| 3550.0000       | -13.0000 | -59.3014 **                                                    | -60.5033 **                                                  |
| 4260.0000       | -13.0000 | -58.8006 **                                                    | -59.9892 **                                                  |
| 4970.0000       | -13.0000 | -59.2315 **                                                    | -59.1848 **                                                  |
| 5680.0000       | -13.0000 | -58.5265 **                                                    | -56.9542 **                                                  |
| 6390.0000       | -13.0000 | -55.0853 **                                                    | -54.0690 **                                                  |
| 7100.0000       | -13.0000 | -53.4189 **                                                    | -54.6932 **                                                  |

#### RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Rezza & Fuad

Fri, 16 May, 2025

Remarks: \*\* Indicates the spurious emission could not be detected due to noise limitations or ambient.

\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

System MU: 4.03 dB

Temp(Deg): 23.4 Hum(%RH):68.6

Remarks:

Passed Results

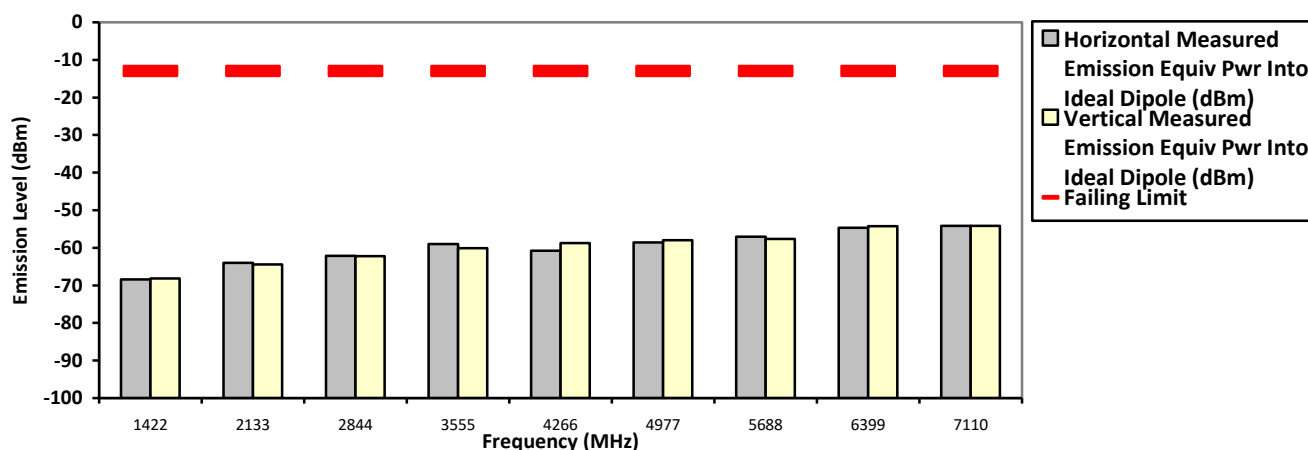
Marginal Results

Failed Results

|                                         |                                       |
|-----------------------------------------|---------------------------------------|
| Test: SAC Transmitter Radiated Emission | EMC SR ID: 0875N00-EMC-00083          |
| Model Number: H55TGT9PW8BN              | S/N: 437ZBG0594                       |
| Battery: PMNN4895A                      |                                       |
| Accessory: AN000297A01                  |                                       |
| Test Mode: TX LTE Band 17 (Y-Plane)     | Test Frequency: 711.000000 MHz (High) |
| Channel Bandwidth: 10MHz                | Power: 0.25119 Watt(s)/Max Power      |

| Frequency (MHz) | Limit    | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|-----------------|----------|----------------------------------------------------------------|--------------------------------------------------------------|
| 1422.0000       | -13.0000 | -68.3925 **                                                    | -68.1847 **                                                  |
| 2133.0000       | -13.0000 | -64.0202 **                                                    | -64.4082 **                                                  |
| 2844.0000       | -13.0000 | -62.1261 **                                                    | -62.2174 **                                                  |
| 3555.0000       | -13.0000 | -58.9802 **                                                    | -60.0915 **                                                  |
| 4266.0000       | -13.0000 | -60.7494 **                                                    | -58.7360 **                                                  |
| 4977.0000       | -13.0000 | -58.6135 **                                                    | -57.9584 **                                                  |
| 5688.0000       | -13.0000 | -57.0678 **                                                    | -57.6188 **                                                  |
| 6399.0000       | -13.0000 | -54.6295 **                                                    | -54.2359 **                                                  |
| 7110.0000       | -13.0000 | -54.1380 **                                                    | -54.1881 **                                                  |

#### RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Rezza & Fuad

Fri, 16 May, 2025

Remarks: \*\* Indicates the spurious emission could not be detected due to noise limitations or ambient.

\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

System MU: 4.03 dB

Temp(Deg): 23.4 Hum(%RH):68.6

Remarks:

Passed Results

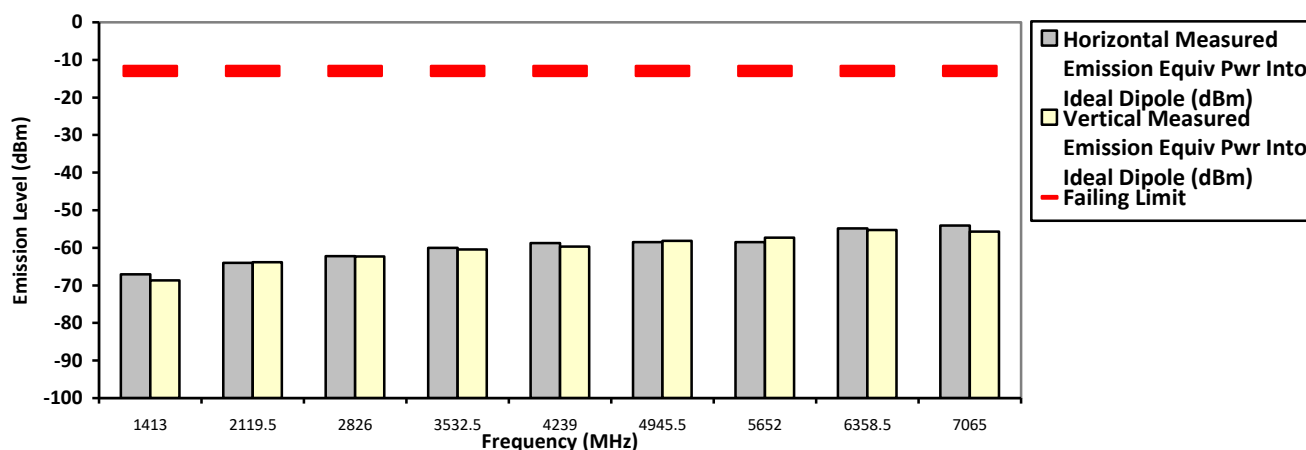
Marginal Results

Failed Results

|                                         |                                      |
|-----------------------------------------|--------------------------------------|
| Test: SAC Transmitter Radiated Emission | EMC SR ID: 0875N00-EMC-00083         |
| Model Number: H55TGT9PW8BN              | S/N: 437ZBG0594                      |
| Battery: PMNN4895A                      |                                      |
| Accessory: AN000297A01                  |                                      |
| Test Mode: TX LTE Band 17 (Z-Plane)     | Test Frequency: 706.500000 MHz (Low) |
| Channel Bandwidth: 5MHz                 | Power: 0.25119 Watt(s)/Max Power     |

| Frequency (MHz) | Limit    | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|-----------------|----------|----------------------------------------------------------------|--------------------------------------------------------------|
| 1413.0000       | -13.0000 | -67.0309 **                                                    | -68.6807 **                                                  |
| 2119.5000       | -13.0000 | -64.0393 **                                                    | -63.8181 **                                                  |
| 2826.0000       | -13.0000 | -62.2232 **                                                    | -62.3121 **                                                  |
| 3532.5000       | -13.0000 | -60.0275 **                                                    | -60.4043 **                                                  |
| 4239.0000       | -13.0000 | -58.7694 **                                                    | -59.6511 **                                                  |
| 4945.5000       | -13.0000 | -58.4795 **                                                    | -58.1814 **                                                  |
| 5652.0000       | -13.0000 | -58.4588 **                                                    | -57.3346 **                                                  |
| 6358.5000       | -13.0000 | -54.8210 **                                                    | -55.2228 **                                                  |
| 7065.0000       | -13.0000 | -54.0345 **                                                    | -55.6871 **                                                  |

#### RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Rezza & Fuad

Fri, 16 May, 2025

Remarks: \*\* Indicates the spurious emission could not be detected due to noise limitations or ambient.

\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

System MU: 4.03 dB

Temp(Deg): 23.4 Hum(%RH):68.6

Remarks:

Passed Results

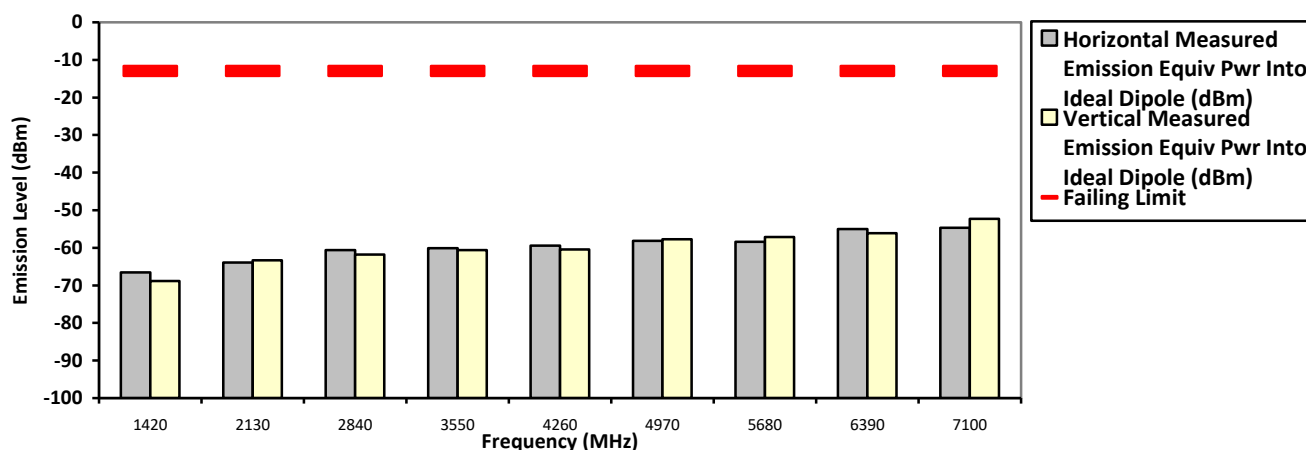
Marginal Results

Failed Results

|                                         |                                      |
|-----------------------------------------|--------------------------------------|
| Test: SAC Transmitter Radiated Emission | EMC SR ID: 0875N00-EMC-00083         |
| Model Number: H55TGT9PW8BN              | S/N: 437ZBG0594                      |
| Battery: PMNN4895A                      |                                      |
| Accessory: AN000297A01                  |                                      |
| Test Mode: TX LTE Band 17 (Z-Plane)     | Test Frequency: 710.000000 MHz (Mid) |
| Channel Bandwidth: 10MHz                | Power: 0.25119 Watt(s)/Max Power     |

| Frequency (MHz) | Limit    | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|-----------------|----------|----------------------------------------------------------------|--------------------------------------------------------------|
| 1420.0000       | -13.0000 | -66.5517 **                                                    | -68.8579 **                                                  |
| 2130.0000       | -13.0000 | -63.9028 **                                                    | -63.3155 **                                                  |
| 2840.0000       | -13.0000 | -60.6281 **                                                    | -61.8326 **                                                  |
| 3550.0000       | -13.0000 | -60.1371 **                                                    | -60.5906 **                                                  |
| 4260.0000       | -13.0000 | -59.4484 **                                                    | -60.4615 **                                                  |
| 4970.0000       | -13.0000 | -58.1795 **                                                    | -57.7655 **                                                  |
| 5680.0000       | -13.0000 | -58.4448 **                                                    | -57.1572 **                                                  |
| 6390.0000       | -13.0000 | -54.9996 **                                                    | -56.1182 **                                                  |
| 7100.0000       | -13.0000 | -54.6764 **                                                    | -52.2727 **                                                  |

#### RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Rezza & Fuad

Fri, 16 May, 2025

Remarks: \*\* Indicates the spurious emission could not be detected due to noise limitations or ambient.

\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

System MU: 4.03 dB

Temp(Deg): 23.4 Hum(%RH):68.6

Remarks:

Passed Results

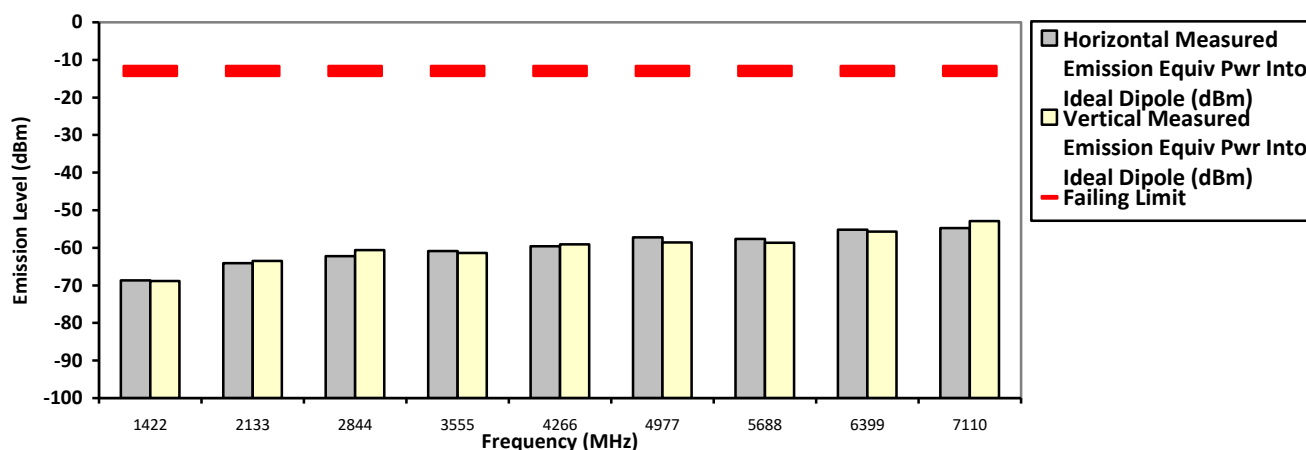
Marginal Results

Failed Results

|                                         |                                       |
|-----------------------------------------|---------------------------------------|
| Test: SAC Transmitter Radiated Emission | EMC SR ID: 0875N00-EMC-00083          |
| Model Number: H55TGT9PW8BN              | S/N: 437ZBG0594                       |
| Battery: PMNN4895A                      |                                       |
| Accessory: AN000297A01                  |                                       |
| Test Mode: TX LTE Band 17 (Z-Plane)     | Test Frequency: 711.000000 MHz (High) |
| Channel Bandwidth: 10MHz                | Power: 0.25119 Watt(s)/Max Power      |

| Frequency (MHz) | Limit    | Horizontal Measured Emission Equiv Pwr Into Ideal Dipole (dBm) | Vertical Measured Emission Equiv Pwr Into ideal Dipole (dBm) |
|-----------------|----------|----------------------------------------------------------------|--------------------------------------------------------------|
| 1422.0000       | -13.0000 | -68.6673 **                                                    | -68.8355 **                                                  |
| 2133.0000       | -13.0000 | -64.0577 **                                                    | -63.4777 **                                                  |
| 2844.0000       | -13.0000 | -62.2388 **                                                    | -60.6477 **                                                  |
| 3555.0000       | -13.0000 | -60.8669 **                                                    | -61.3713 **                                                  |
| 4266.0000       | -13.0000 | -59.5754 **                                                    | -59.1086 **                                                  |
| 4977.0000       | -13.0000 | -57.2261 **                                                    | -58.5610 **                                                  |
| 5688.0000       | -13.0000 | -57.6595 **                                                    | -58.6797 **                                                  |
| 6399.0000       | -13.0000 | -55.1449 **                                                    | -55.6784 **                                                  |
| 7110.0000       | -13.0000 | -54.7494 **                                                    | -52.8893 **                                                  |

#### RADIATED SPURIOUS EMISSIONS



The data presented here was taken using the substitution method as found in the ANSI C63.26-2015 document.

Motorola Penang EMC Lab - Test Performed by: Rezza & Fuad

Fri, 16 May, 2025

Remarks: \*\* Indicates the spurious emission could not be detected due to noise limitations or ambient.

\*Pursuant to CFR 47 Part 2.1057 ( c ), emissions attenuated more than 20 dB below the permissible limit are not reported

System MU: 4.03 dB

Temp(Deg): 23.4 Hum(%RH):68.6

Remarks:

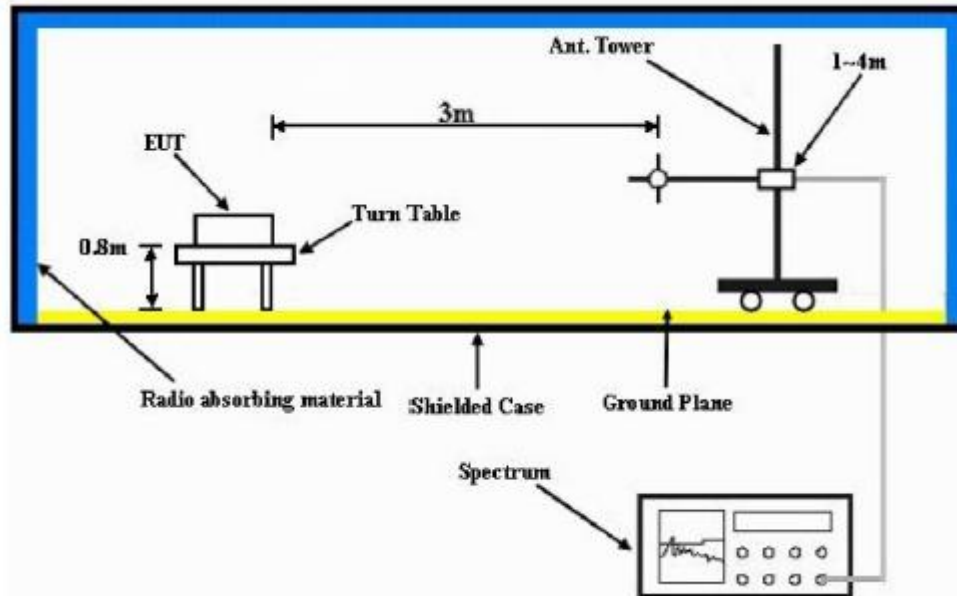
Passed Results

Marginal Results

Failed Results

### 1.13. Effective Radiated Power (ERP)

#### 1.13.1. Test Setup



- 1) The spectrum setting for scanning Radiated Emission below 1 GHz is RBW = 100 kHz, VBW = 300 kHz and above 1 GHz is RBW = 1MHz, VBW = 3MHz. Detector mode is RMS.
- 2) In the semi-anechoic chamber, setup as illustrated above the EUT placed on the Turn Table at 0.8m height for below 1GHz measurement and at 1.5m height for above 1GHz measurement, rotated the table around 360 degrees to search the maximum radiation power and receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum polar radiated power. The "Read Value" is the spectrum reading the maximum power value.
- 3) The substitution antenna is substituted for EUT at the same position and signals generator (S.G) export the CW signal to the substitution antenna via a TX cable. The receiver antenna shall be rotated vertical and horizontal polarization and moved height from 1m to 4m to find the maximum radiation power. Record the power level of maximum radiation power from spectrum. So, the measured substitution value = Ref level of S.G + TX cables loss – Substituted Antenna Gain.
- 4) EIRP = "Read Value" + Measured substitution value.

#### 1.13.2. Test Limit

The maximum output power of the transmitter for mobile stations is 100 watts (20 dBw). Power is given in terms of effective radiated power (ERP).

#### 1.13.3. Effective Radiated Power (ERP) - LTE Band 17 (704-716MHz)

[Refer to 1.6.4 / Not Performed.](#)

--End of Test Report--