

FCC Measurement/Technical Report on SARA-R422M10S

FCC ID: XPYUBX20VA01 IC: 8595A-UBX20VA01

Test Report Reference: MDE_UBLOX_2401_FCC_01

Test Laboratory:

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Note:

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1 APPLIED STANDARDS AND TEST SUMMARY

1.1 APPLIED STANDARDS

Type of Authorization

Certification for a cellular mobile device.

Applicable FCC Rules

Prepared in accordance with the requirements of FCC Rules and Regulations as listed in 47 CFR Ch.1 Parts 2 and 90, (10-1-23 Edition). The following subparts are applicable to the results in this test report.

Part 2, Subpart J - Equipment Authorization Procedures, Certification

Part 22, Subpart H - Cellular Radiotelephone Service

§ 22.905 - Channels for cellular service

§ 22.913 - Effective radiated power limits

§ 22.917 – Emission limitations for cellular equipment

Part 24, Subpart E - Broadband PCS

§ 24.232 – Power and antenna height limits

§ 24.235 - Frequency stability

§ 24.238 - Emission limitations for Broadband PCS equipment

Part 27; Miscellaneous Wireless Communications Services

Subpart C - Technical standards

§ 27.50 - Power and duty cycle limits

§ 27.53 – Emission limits

§ 27.54 – Frequency stability

Subpart P – Regulations Governing Licensing and Use of 900 MHz7 Broadband Service in the 897.5 – 900.5 MHz and 936.5 – 939.5 MHz Bands

§ 27.1506 - Frequencies

§ 27.1507 - Effective radiated power limits for 900 MHz broadband systems

§ 27.1508 – Field strength limit

§ 27.1509 - Emission limits



Part 90; Private Land Mobile Radio Services

Subpart S—REGULATIONS GOVERNING LICENSING AND USE OF FREQUENCIES IN THE 806-824, 851-869, 896-901, AND 935-940 MHZ BANDS

Subpart R—REGULATIONS GOVERNING THE LICENSING AND USE OF FREQUENCIES IN THE 763-775 AND 793-805 MHZ BANDS

§ 90.635 – Limitations on power and antenna height

§ 90.543 – Emission limitations

§ 90.539 – Frequency stability

The tests were selected and performed with reference to:

ANSI C63.26: 2015

• FCC KDB 971168 applying "Measurement guidance for certification of licensed digital transmitters" 971168 D01 v03r01, 2018-04-09

In general tests are performed according to the ANSI standard. If the KDB is used for testing in addition to the ANSI, the result of the affected test is marked with KDB).



1.2 FCC-IC CORRELATION TABLE

Measurement	FCC reference	ISED reference
RF Output Power	§ 2.1046 § 90.635	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.12 RSS-140 Issue 1, 4.3
Peak to Average-Ratio	§ 90.635	RSS-140 Issue 1, 4.3
Emission and Occupied bandwidth	§ 2.1049	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.7
Spurious Emission at Antenna Terminals	§ 2.1051 § 90.543	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.13 RSS-140 Issue 1, 4.4
Band Edge Compliance	§ 2.1051 § 90.543	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.13 RSS-140 Issue 1, 4.4
Frequency stability	§ 2.1055 § 90.539	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.11 RSS-140 Issue 1, 4.2
Field strength of spurious radiation	§ 2.1053 § 90.543	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.13 RSS-140 Issue 1, 4.4



Measurement	FCC reference	ISED reference
RF Output Power	§ 2.1046 § 22.913	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.12 RSS-132 Issue 4, 5.4
Peak-Average-Ratio	-	RSS 132 Issue 4: 5.4
Emission and Occupied bandwidth	§ 2.1049	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.7
Spurious Emission at Antenna Terminals	§ 2.1051 § 22.917	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.13 RSS-132 Issue 4, 5.5
Band Edge Compliance	§ 2.1051 § 22.917	RSS-GEN Issue 4, 6.13 RSS-132 Issue 4, 5.5
Frequency stability	§ 2.1055 § 22.355	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.11 RSS-132 Issue 4: 5.3
Field strength of spurious radiation	§ 2.1053 § 22.917	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.13 RSS-132 Issue 4: 5.5



Measurement	FCC reference	ISED reference
RF Output Power	§ 2.1046 § 24.232	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.12 RSS-133 Issue 6 & AMD 1, 6.4
Peak-Average-Ratio	§ 24.232	RSS 133 Issue 6 & AMD 1: 6.4
Emission and Occupied bandwidth	§ 2.1049	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.7
Spurious Emission at Antenna Terminals	§ 2.1051 § 24.238	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.13 RSS-133 Issue 6 & AMD 1, 6.5
Band Edge Compliance	§ 2.1051 § 24.238	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.13 RSS-133 Issue 6 & AMD 1, 6.5
Frequency stability	§ 2.1055 § 24.235	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.11 RSS-133 Issue 6 & AMD 1: 6.3
Field strength of spurious radiation	§ 2.1053 § 24.236	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.13 RSS-133 Issue 6 & AMD 1: 6.5



Measurement	FCC reference	ISED reference
RF Output Power	§ 2.1046 § 27.50	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.12 RSS-130 Issue 2, 4.6.2/4.6.3 RSS-139 Issue 4, 5.5 RSS-199 Issue 4, 5.5
Peak to Average-Ratio	§ 27.50	RSS-130 Issue 2: 4.6.1 RSS 139 Issue 4: 5.5 RSS-199 Issue 4, 5.5
Emission and Occupied bandwidth	§ 2.1049	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.7
Spurious Emission at Antenna Terminals	§ 2.1051 § 27.53	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.13 RSS-130 Issue 2: 4.7.1/4.7.2 RSS-139 Issue 4, 5.6 RSS-199 Issue 4, 5.6
Band Edge Compliance	§ 2.1051 § 27.53	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.13 RSS-130 Issue 2: 4.7.1/4.7.2 RSS-139 Issue 4, 5.6 RSS-199 Issue 4, 5.6
Frequency stability	§ 2.1055 § 27.54	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.11 RSS-130 Issue 2: 4.5 RSS-139 Issue 4: 5.4 RSS-199 Issue 4, 5.4
Field strength of spurious radiation	§ 2.1053 § 27.53	RSS-GEN Issue 5 & AMD 1 & AMD 2, 6.13 RSS-130 Issue 2: 4.7.1/4.7.2 RSS-139 Issue 4: 5.6 RSS-199 Issue 4, 5.6



1.3 MEASUREMENT SUMMARY

47 CFR CHAPTER I FCC PART 22 Subpart H § 2.1046 § 22.913

RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1 Final Result

Narrowband Signal: 5.2.4.3.3

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method	Setup	Date	FCC	IC
GSM, GSM 850 EDGE, high channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 850 EDGE, low channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 850 EDGE, mid channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 850 GPRS, low channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed

47 CFR CHAPTER I FCC PART 22 Subpart H § 2.1046 § 22.913

RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Final Result

Wideband Signal: 5.2.4.4

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
CAT-M1, eFDD 26 16QAM, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, high channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, high channel, 10 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, high channel, 10 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, high channel, 3 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, high channel, 3 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, high channel, 5 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, high channel, 5 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, low channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, low channel, 10 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, low channel, 10 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, low channel, 3 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, low channel, 3 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, low channel, 5 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, low channel, 5 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, mid channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, mid channel, 10 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, mid channel, 10 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, mid channel, 3 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, mid channel, 3 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 16QAM, mid channel, 5 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, high channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, high channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, high channel, 10 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, high channel, 10 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed

TEST REPORT REFERENCE: MDE_UBLOX_2401_FCC_01

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RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Wideband Signal: 5.2.4.4 **Final Result**

OP-Mode	Setup	Date	FCC	IC
Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method				
CAT-M1, eFDD 26 QPSK, high channel, 10 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, high channel, 3 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, high channel, 3 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, high channel, 3 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, high channel, 5 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, high channel, 5 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, high channel, 5 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-06-20	Passed	Passed
CAT-M1, eFDD 26 QPSK, low channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, low channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, low channel, 10 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, low channel, 10 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, low channel, 10 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, low channel, 3 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, low channel, 3 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, low channel, 3 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, low channel, 5 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, low channel, 5 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, low channel, 5 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, mid channel, 1.4 MHz, 3, conducted	S01 BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, mid channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, mid channel, 10 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, mid channel, 10 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, mid channel, 10 MHz, 6, conducted	S01 BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, mid channel, 3 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, mid channel, 3 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, mid channel, 3 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, mid channel, 5 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 26 QPSK, mid channel, 5 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 16QAM, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 16QAM, high channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 16QAM, high channel, 10 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, high channel, 10 MHz, 5, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, high channel, 3 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, high channel, 3 MHz, 5, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, high channel, 5 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, high channel, 5 MHz, 5, conducted	S01 BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 16QAM, low channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 16QAM, low channel, 10 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, low channel, 10 MHz, 5, conducted	 S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, low channel, 3 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, low channel, 3 MHz, 5, conducted	 S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, low channel, 5 MHz, 1, conducted	 S01_BC08	2024-05-22	Passed	Passed
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RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Wideband Signal: 5.2.4.4 **Final Result**

OP-Mode	Setup	Date	FCC	IC
Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	·			
CAT-M1, eFDD 5 16QAM, low channel, 5 MHz, 5, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 16QAM, mid channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 16QAM, mid channel, 10 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, mid channel, 10 MHz, 5, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, mid channel, 3 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, mid channel, 3 MHz, 5, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 16QAM, mid channel, 5 MHz, 5, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 QPSK, high channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 QPSK, high channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 QPSK, high channel, 10 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, high channel, 10 MHz, 3, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, high channel, 10 MHz, 6, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, high channel, 3 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, high channel, 3 MHz, 3, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, high channel, 3 MHz, 6, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, high channel, 5 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, high channel, 5 MHz, 3, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, high channel, 5 MHz, 6, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 QPSK, low channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 QPSK, low channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 QPSK, low channel, 10 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, low channel, 10 MHz, 3, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, low channel, 10 MHz, 6, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, low channel, 3 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, low channel, 3 MHz, 3, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, low channel, 3 MHz, 6, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, low channel, 5 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, low channel, 5 MHz, 3, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, low channel, 5 MHz, 6, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 QPSK, mid channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 QPSK, mid channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 5 QPSK, mid channel, 10 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, mid channel, 10 MHz, 3, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, mid channel, 10 MHz, 6, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT M1, eFDD 5 QPSK, mid channel, 3 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, mid channel, 3 MHz, 3, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT M1 cEDD 5 QPSK, mid channel, 3 MHz, 6, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT M1 cEDD 5 QPSK, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT M1 cEDD 5 QPSK, mid channel, 5 MHz, 3, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 5 QPSK, mid channel, 5 MHz, 6, conducted	S01_BC08	2024-05-22	Passed	Passed



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The measurement was performed according to ANSI C6 Wideband Signal: 5.2.4.4	3.26: 2015; 5	.2.4.1,	Final Re	esult
OP-Mode Tachnology Padio Tachnology Operating Frequency ChRW	Setup	Date	FCC	IC
Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method				
NB-IoT, eFDD 5 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 5 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 5 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passe
NB-IoT, eFDD 5 QPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passe
NB-IoT, eFDD 5 QPSK, high channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-28	Passed	Passe
NB-IoT, eFDD 5 QPSK, high channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	Passe
NB-IoT, eFDD 5 QPSK, high channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	Passe
NB-IoT, eFDD 5 QPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passe
NB-IoT, eFDD 5 QPSK, low channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-28	Passed	Passe
NB-IoT, eFDD 5 QPSK, low channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	Passe
NB-IoT, eFDD 5 QPSK, low channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	Passe
NB-IoT, eFDD 5 QPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passe
NB-IoT, eFDD 5 QPSK, mid channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-28	Passed	Passe
NB-IoT, eFDD 5 QPSK, mid channel, 0.2 MHz, 3, conducted	S01 BC08	2024-05-28	Passed	Passe
NB-IoT, eFDD 5 QPSK, mid channel, 0.2 MHz, 6, conducted	 S01_BC08	2024-05-28	Passed	Passe
Emission and occupied bandwidth The measurement was performed according to ANSI C6 relative meas. Procedure [26dB for GSM, EGDE, WCDM			Final Re	sult
Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) OP-Mode Technology, Radio Technology, Operating Frequency, ChBW,	3.26: 2015; 5		Final Re	sult IC
Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method	3.26: 2015; 5 IA, HSDPA, HS	SUPA])		IC
Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method GSM, GSM 850 EDGE, high channel, 0.2 MHz, conducted	3.26: 2015; 5 A, HSDPA, HS Setup	SUPA]) Date	FCC	IC Passe
Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method GSM, GSM 850 EDGE, high channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, low channel, 0.2 MHz, conducted	3.26: 2015; 5 IA, HSDPA, HS Setup S01_BC08	Date 2024-06-18	FCC Passed	IC Passe
Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method GSM, GSM 850 EDGE, high channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, low channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, mid channel, 0.2 MHz, conducted	3.26: 2015; 5 IA, HSDPA, HS Setup S01_BC08 S01_BC08 S01_BC08	Date 2024-06-18 2024-06-18	FCC Passed Passed	IC Passe Passe Passe
Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method GSM, GSM 850 EDGE, high channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, low channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted	3.26: 2015; 5 A, HSDPA, HS Setup S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08	Date 2024-06-18 2024-06-18 2024-06-18	FCC Passed Passed Passed	IC Passe Passe Passe Passe
Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method GSM, GSM 850 EDGE, high channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, low channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, low channel, 0.2 MHz, conducted	3.26: 2015; 5 IA, HSDPA, HS Setup S01_BC08 S01_BC08 S01_BC08	Date 2024-06-18 2024-06-18 2024-06-18 2024-06-18	FCC Passed Passed Passed Passed	
Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method GSM, GSM 850 EDGE, high channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, low channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, low channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted	3.26: 2015; 5 A, HSDPA, HS Setup S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08	Date 2024-06-18 2024-06-18 2024-06-18 2024-06-18 2024-06-18	FCC Passed Passed Passed Passed Passed	Passe Passe Passe Passe Passe
Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) DP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method GSM, GSM 850 EDGE, high channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, low channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, low channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM	3.26: 2015; 5 A, HSDPA, HS Setup S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08	Date 2024-06-18 2024-06-18 2024-06-18 2024-06-18 2024-06-18	Passed Passed Passed Passed Passed Passed	Passe Passe Passe Passe Passe Passe
Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) DP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method GSM, GSM 850 EDGE, high channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, low channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, low channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.5 MHz, conducted GSM, GSM	3.26: 2015; 5 IA, HSDPA, HS Setup S01_BC08	Date 2024-06-18 2024-06-18 2024-06-18 2024-06-18 2024-06-18 2024-06-18	Passed Passed Passed Passed Passed Passed Passed	IC Passe Passe Passe Passe Passe Passe Tasse
Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) DP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method GSM, GSM 850 EDGE, high channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, low channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, low channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 26 16QAM, high channel, 1.4 MHz, 5, conducted	3.26: 2015; 5 IA, HSDPA, HS Setup S01_BC08	Date 2024-06-18 2024-06-18 2024-06-18 2024-06-18 2024-06-18 2024-06-18 2024-06-18	FCC Passed Passed Passed Passed Passed Passed Final Re	Passe Passe Passe Passe Passe Passe Tasse
Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method GSM, GSM 850 EDGE, high channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, low channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, low channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted Temission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 26 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 26 16QAM, low channel, 1.4 MHz, 5, conducted	3.26: 2015; 5 A, HSDPA, HS Setup S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 501_BC08 501_BC08 501_BC08	Date 2024-06-18 2024-06-18 2024-06-18 2024-06-18 2024-06-18 2024-06-18 .4.3 SUPA]) Date 2024-06-17	Passed Passed Passed Passed Passed Passed Passed Passed	Passe Passe Passe Passe Passe Passe Passe Passe
Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method GSM, GSM 850 EDGE, high channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, low channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, low channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted 47 CFR CHAPTER I FCC PART 22 Subpart H § 2.1 Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 26 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 26 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 26 16QAM, mid channel, 1.4 MHz, 5, conducted	3.26: 2015; 5 A, HSDPA, HS Setup S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 501_BC08 501_BC08 501_BC08	Date 2024-06-18 2024-06-18 2024-06-18 2024-06-18 2024-06-18 2024-06-18 .4.3 SUPA]) Date 2024-06-17 2024-06-17	Passed Passed Passed Passed Passed Passed Passed Passed	IC Passe Passe Passe Passe Passe Passe
Emission and occupied bandwidth The measurement was performed according to ANSI C6 (relative meas. Procedure [26dB for GSM, EGDE, WCDM 5.4.4 (Power bandwidth (99%)) OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method GSM, GSM 850 EDGE, high channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, low channel, 0.2 MHz, conducted GSM, GSM 850 EDGE, mid channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, high channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, low channel, 0.2 MHz, conducted GSM, GSM 850 GPRS, mid channel, 0.2 MHz, conducted	3.26: 2015; 5 IA, HSDPA, HS Setup S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 Mage: S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08	Date 2024-06-18 2024-06-18 2024-06-18 2024-06-18 2024-06-18 2024-06-17 2024-06-17 2024-06-17	FCC Passed Passed Passed Passed Passed Passed Passed	Passe

S01_BC08

S01_BC08

2024-06-17

2024-06-14

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CAT-M1, eFDD 26 QPSK, mid channel, 1.4 MHz, 6, conducted

CAT-M1, eFDD 5 16QAM, high channel, 1.4 MHz, 5, conducted

Passed

Passed

Passed

Passed



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The measurement was performed according to ANSI C63.26: 2015; 5.4.3 (relative meas. Procedure [26dB for GSM, EGDE, WCDMA, HSDPA, HSUPA]) 5.4.4 (Power bandwidth (99%))

Final Result

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
CAT-M1, eFDD 5 16QAM, low channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 5 16QAM, mid channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 5 QPSK, high channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 5 QPSK, low channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 5 QPSK, mid channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	Passed

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Emission and occupied bandwidth

The measurement was performed according to ANSI C63.26: 2015; 5.4.3 (relative meas. Procedure [26dB for GSM, EGDE, WCDMA, HSDPA, HSUPA]) 5.4.4 (Power bandwidth (99%))

Final Result

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
NB-IoT, eFDD 5 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 5 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 5 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 5 QPSK, high channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 5 QPSK, low channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 5 QPSK, mid channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed

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RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1 Narrowband Signal: 5.2.4.3.3

Final Result

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method	Setup	Date	FCC	IC
GSM, GSM 1900 EDGE, high channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 1900 EDGE, low channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 1900 EDGE, mid channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 1900 GPRS, high channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 1900 GPRS, low channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 1900 GPRS, mid channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed

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RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Final Result

Wideband Signal: 5.2.4.4

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 2 16QAM, high channel, 10 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, high channel, 10 MHz, 5, conducted	S01_BC08	2024-05-22	Passed	Passed

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RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Final Result

Wideband Signal: 5.2.4.4

OP-Mode	Setup	Date	FCC	IC
Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	-			
CAT-M1, eFDD 2 16QAM, high channel, 3 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, high channel, 3 MHz, 5, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, high channel, 5 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, high channel, 5 MHz, 5, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 2 16QAM, low channel, 10 MHz, 1, conducted	S01 BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, low channel, 10 MHz, 5, conducted	S01 BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, low channel, 3 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, low channel, 3 MHz, 5, conducted	 S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, low channel, 5 MHz, 1, conducted	S01 BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, low channel, 5 MHz, 5, conducted	S01 BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, mid channel, 1.4 MHz, 1, conducted	S01 BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 2 16QAM, mid channel, 1.4 MHz, 5, conducted	S01 BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 2 16QAM, mid channel, 10 MHz, 1, conducted	S01 BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, mid channel, 10 MHz, 5, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, mid channel, 3 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, mid channel, 3 MHz, 5, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 16QAM, mid channel, 5 MHz, 5, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 ToQAM, find channel, 5-M12, 5, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 2 QFSK, high channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 2 QFSK, high channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
	-	2024-05-24	Passed	Passed
CAT_M1_eFDD_2_QPSK, high channel, 10 MHz, 1, conducted	S01_BC08			
CAT_M1_eFDD_2_QPSK_ high channel, 10 MHz, 3, conducted	S01_BC08	2024-05-22 2024-05-22	Passed	Passed Passed
CAT_M1_eFDD_2_QPSK, high channel, 10 MHz, 6, conducted	S01_BC08		Passed	
CAT M1 eEDD 2 QPSK, high channel, 3 MHz, 1, conducted	S01_BC08	2024-05-22	Passed Passed	Passed
CAT_M1_eFDD_2_QPSK, high channel, 3 MHz, 4, conducted	S01_BC08	2024-05-22		Passed
CAT-M1, eFDD 2 QPSK, high channel, 3 MHz, 6, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, high channel, 5 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, high channel, 5 MHz, 3, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, high channel, 5 MHz, 6, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 2 QPSK, low channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 2 QPSK, low channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 2 QPSK, low channel, 10 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, low channel, 10 MHz, 3, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, low channel, 10 MHz, 6, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, low channel, 3 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, low channel, 3 MHz, 3, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, low channel, 3 MHz, 6, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, low channel, 5 MHz, 1, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, low channel, 5 MHz, 3, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, low channel, 5 MHz, 6, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 2 QPSK, mid channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed



RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Final Result

Wideband Signal: 5.2.4.4

OP-Mode	Setup	Date	FCC	IC
Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Jour			
CAT-M1, eFDD 2 QPSK, mid channel, 1.4 MHz, 6, conducted	S01 BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 2 QPSK, mid channel, 10 MHz, 1, conducted	S01 BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, mid channel, 10 MHz, 3, conducted	S01 BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, mid channel, 10 MHz, 6, conducted	S01 BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, mid channel, 3 MHz, 1, conducted	S01 BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 OPSK, mid channel, 3 MHz, 3, conducted	S01 BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 OPSK, mid channel, 3 MHz, 6, conducted	S01 BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, mid channel, 5 MHz, 1, conducted	S01 BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, mid channel, 5 MHz, 3, conducted	S01_BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 2 QPSK, mid channel, 5 MHz, 6, conducted	S01 BC08	2024-05-22	Passed	Passed
CAT-M1, eFDD 25 16QAM, high channel, 1.4 MHz, 1, conducted	S01 BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 16QAM, high channel, 1.4 MHz, 5, conducted	S01 BC08	2024-06-13	Passed	Passed
CAT-M1, eFDD 25 16QAM, high channel, 10 MHz, 1, conducted	S01 BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 16QAM, high channel, 10 MHz, 5, conducted	S01 BC08	2024-06-13	Passed	Passed
CAT-M1, eFDD 25 16QAM, high channel, 3 MHz, 1, conducted	S01 BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 16QAM, high channel, 3 MHz, 5, conducted	S01 BC08	2024-06-13	Passed	Passed
CAT-M1, eFDD 25 16QAM, high channel, 5 MHz, 1, conducted	S01 BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 16QAM, high channel, 5 MHz, 5, conducted	S01 BC08	2024-06-13	Passed	Passed
CAT-M1, eFDD 25 16QAM, low channel, 1.4 MHz, 1, conducted	S01 BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 16QAM, low channel, 1.4 MHz, 5, conducted	S01 BC08	2024-06-13	Passed	Passed
CAT-M1, eFDD 25 16QAM, low channel, 10 MHz, 1, conducted	S01 BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 16QAM, low channel, 10 MHz, 5, conducted	S01_BC08	2024-06-13	Passed	Passed
CAT-M1, eFDD 25 16QAM, low channel, 3 MHz, 1, conducted	S01 BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 16QAM, low channel, 3 MHz, 5, conducted	S01 BC08	2024-06-13	Passed	Passed
CAT-M1, eFDD 25 16QAM, low channel, 5 MHz, 1, conducted	S01 BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 16QAM, low channel, 5 MHz, 5, conducted	 S01_BC08	2024-06-13	Passed	Passed
CAT-M1, eFDD 25 16QAM, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 16QAM, mid channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-13	Passed	Passed
CAT-M1, eFDD 25 16QAM, mid channel, 10 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 16QAM, mid channel, 10 MHz, 5, conducted	S01 BC08	2024-06-13	Passed	Passed
CAT-M1, eFDD 25 16QAM, mid channel, 3 MHz, 1, conducted	S01 BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 16QAM, mid channel, 3 MHz, 5, conducted	S01_BC08	2024-06-13	Passed	Passed
CAT-M1, eFDD 25 16QAM, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 16QAM, mid channel, 5 MHz, 5, conducted	S01_BC08	2024-06-13	Passed	Passed
CAT-M1, eFDD 25 QPSK, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, high channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, high channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, high channel, 10 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, high channel, 10 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, high channel, 10 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, high channel, 3 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, high channel, 3 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, high channel, 3 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, high channel, 5 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, high channel, 5 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, high channel, 5 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed



RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Final Result

Wideband Signal: 5.2.4.4

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
CAT-M1, eFDD 25 QPSK, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, low channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, low channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, low channel, 10 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, low channel, 10 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, low channel, 10 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, low channel, 3 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, low channel, 3 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, low channel, 3 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, low channel, 5 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, low channel, 5 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, low channel, 5 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, mid channel, 10 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, mid channel, 10 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, mid channel, 10 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, mid channel, 3 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, mid channel, 3 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, mid channel, 3 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, mid channel, 5 MHz, 3, conducted	S01_BC08	2024-05-24	Passed	Passed
CAT-M1, eFDD 25 QPSK, mid channel, 5 MHz, 6, conducted	S01_BC08	2024-05-24	Passed	Passed

47 CFR CHAPTER I FCC PART 24 Subpart E § 2.1046 § 24.232

RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Final Result

Wideband Signal: 5.2.4.4

OP-Mode	Setup	Date	FCC	IC
Technology, Radio Technology, Operating Frequency, ChBW,				
Ressource Blocks, Measurement method				
NB-IoT, eFDD 2 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 2 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 2 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 2 QPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 2 QPSK, high channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 2 QPSK, high channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 2 QPSK, high channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 2 QPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 2 QPSK, low channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 2 QPSK, low channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 2 QPSK, low channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 2 QPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 2 QPSK, mid channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 2 QPSK, mid channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	Passed



RF Output Power The measurement was performed according to ANSI C63 Wideband Signal: 5.2.4.4	3.26: 2015; 5.3	2.4.1,	Final Re	esult
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
NB-IoT, eFDD 2 QPSK, mid channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	Passed
47 CFR CHAPTER I FCC PART 24 Subpart E § 2.10	49			
Emission and occupied bandwidth The measurement was performed according to ANSI C63 (relative meas. Procedure [26dB for GSM, EGDE, WCDM, 5.4.4 (Power bandwidth (99%))			Final Re	esult
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Measurement method	Setup	Date	FCC	IC
GSM, GSM 1900 EDGE, high channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 1900 EDGE, low channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 1900 EDGE, mid channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 1900 GPRS, high channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 1900 GPRS, low channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
GSM, GSM 1900 GPRS, mid channel, 0.2 MHz, conducted	S01_BC08	2024-06-18	Passed	Passed
47 CFR CHAPTER I FCC PART 24 Subpart E § 2.10 Emission and occupied bandwidth				
The measurement was performed according to ANSI C63 meas. Procedure [26dB for GSM, EGDE, WCDMA, HSDPA			Final R	esult
bandwidth (99%))	,	(
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW,	Setup	Date	FCC	IC
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date		
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted	Setup S01_BC08	Date 2024-06-14	Passed	Passed
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 5, conducted	Setup S01_BC08 S01_BC08	Date 2024-06-14 2024-06-14	Passed Passed	Passed Passed
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, mid channel, 1.4 MHz, 5, conducted	Setup S01_BC08 S01_BC08 S01_BC08	Date 2024-06-14 2024-06-14 2024-06-14	Passed Passed Passed	Passed Passed Passed
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, mid channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 QPSK, high channel, 1.4 MHz, 6, conducted	Setup S01_BC08 S01_BC08 S01_BC08 S01_BC08	Date 2024-06-14 2024-06-14 2024-06-14	Passed Passed Passed Passed	Passed Passed Passed Passed
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, mid channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 QPSK, high channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, low channel, 1.4 MHz, 6, conducted	Setup S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08	Date 2024-06-14 2024-06-14 2024-06-14 2024-06-14	Passed Passed Passed Passed Passed	Passed Passed Passed Passed Passed
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, mid channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 QPSK, high channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, low channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, mid channel, 1.4 MHz, 6, conducted	Setup S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08	Date 2024-06-14 2024-06-14 2024-06-14 2024-06-14 2024-06-14	Passed Passed Passed Passed Passed	Passed Passed Passed Passed Passed
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, mid channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 QPSK, high channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, low channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 16QAM, high channel, 1.4 MHz, 5, conducted	Setup S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08	Date 2024-06-14 2024-06-14 2024-06-14 2024-06-14	Passed Passed Passed Passed Passed Passed	Passed Passed Passed Passed Passed Passed
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, mid channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 QPSK, high channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, low channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 16QAM, low channel, 1.4 MHz, 5, conducted	Setup S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08	2024-06-14 2024-06-14 2024-06-14 2024-06-14 2024-06-14 2024-06-17 2024-06-17	Passed Passed Passed Passed Passed Passed Passed	Passed Passed Passed Passed Passed Passed Passed
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, mid channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 QPSK, high channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, low channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 16QAM, mid channel, 1.4 MHz, 5, conducted	Setup S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08	Date 2024-06-14 2024-06-14 2024-06-14 2024-06-14 2024-06-17 2024-06-17 2024-06-17	Passed Passed Passed Passed Passed Passed Passed Passed	Passed Passed Passed Passed Passed Passed Passed Passed
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, mid channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 QPSK, high channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, low channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 16QAM, mid channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 QPSK, high channel, 1.4 MHz, 6, conducted	Setup S01_BC08	Date 2024-06-14 2024-06-14 2024-06-14 2024-06-14 2024-06-17 2024-06-17 2024-06-17 2024-06-17	Passed Passed Passed Passed Passed Passed Passed Passed Passed	Passed Passed Passed Passed Passed Passed Passed Passed Passed
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, mid channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 QPSK, high channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, low channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 16QAM, mid channel, 1.4 MHz, 5, conducted	Setup S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08 S01_BC08	Date 2024-06-14 2024-06-14 2024-06-14 2024-06-14 2024-06-17 2024-06-17 2024-06-17	Passed Passed Passed Passed Passed Passed Passed Passed	Passed Passed Passed Passed Passed Passed Passed Passed
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, mid channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 QPSK, high channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, low channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 16QAM, mid channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 QPSK, high channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, low channel, 1.4 MHz, 6, conducted	Setup S01_BC08	2024-06-14 2024-06-14 2024-06-14 2024-06-14 2024-06-14 2024-06-17 2024-06-17 2024-06-17 2024-06-17 2024-06-17	Passed Passed Passed Passed Passed Passed Passed Passed Passed Passed	Passed Passed Passed Passed Passed Passed Passed Passed Passed Passed
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, mid channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 QPSK, high channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, low channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 QPSK, high channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, low channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, low channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted	Setup S01_BC08	Date 2024-06-14 2024-06-14 2024-06-14 2024-06-14 2024-06-17 2024-06-17 2024-06-17 2024-06-17 2024-06-17 2024-06-17 2024-06-17	Passed Passed Passed Passed Passed Passed Passed Passed Passed Passed	Passed Passed Passed Passed Passed Passed Passed Passed Passed Passed Passed
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 2 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 16QAM, mid channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 2 QPSK, high channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, low channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 2 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 16QAM, high channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 16QAM, low channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 16QAM, mid channel, 1.4 MHz, 5, conducted CAT-M1, eFDD 25 QPSK, high channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, low channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted CAT-M1, eFDD 25 QPSK, mid channel, 1.4 MHz, 6, conducted	Setup S01_BC08	Date 2024-06-14 2024-06-14 2024-06-14 2024-06-14 2024-06-17 2024-06-17 2024-06-17 2024-06-17 2024-06-17 2024-06-17 2024-06-17	Passed Passed Passed Passed Passed Passed Passed Passed Passed Passed Passed	Passed Passed Passed Passed Passed Passed Passed Passed Passed Passed Passed

S01_BC08

2024-06-17

TEST REPORT REFERENCE: MDE_UBLOX_2401_FCC_01

NB-IoT, eFDD 2 BPSK, high channel, 0.2 MHz, 1, conducted

Passed

Passed



47 CFR CHAPTER I FCC PART 24 Subpart E § 2.1049

Emission and occupied bandwidth

The measurement was performed according to ANSI C63.26: 2015; 5.4.3 (relative meas. Procedure [26dB for GSM, EGDE, WCDMA, HSDPA, HSUPA]) 5.4.4 (Power bandwidth (99%))

Final Result

Final Result

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
NB-IoT, eFDD 2 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 2 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 2 QPSK, high channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 2 QPSK, low channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 2 QPSK, mid channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed

47 CFR CHAPTER I FCC PART 27 Subpart C § 2.1046 § 27.50

RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1,

Wideband Signal: 5.2.4.4

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
CAT-M1, eFDD 12 16QAM, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, high channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, high channel, 10 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, high channel, 10 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, high channel, 3 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, high channel, 3 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, high channel, 5 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, high channel, 5 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, low channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, low channel, 10 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, low channel, 10 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, low channel, 3 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, low channel, 3 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, low channel, 5 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, low channel, 5 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, mid channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, mid channel, 10 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, mid channel, 10 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, mid channel, 3 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, mid channel, 3 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 16QAM, mid channel, 5 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, high channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, high channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, high channel, 10 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, high channel, 10 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, high channel, 10 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, high channel, 3 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, high channel, 3 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed



RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Wideband Signal: 5.2.4.4

OP-Mode	Setup	Date	FCC	IC
Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method				
CAT-M1, eFDD 12 QPSK, high channel, 3 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, high channel, 5 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, high channel, 5 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, high channel, 5 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, low channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, low channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, low channel, 10 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, low channel, 10 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, low channel, 10 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, low channel, 3 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, low channel, 3 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, low channel, 3 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, low channel, 5 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, low channel, 5 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, low channel, 5 MHz, 6, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, mid channel, 1.4 MHz, 1, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, mid channel, 1.4 MHz, 3, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, mid channel, 1.4 MHz, 6, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, mid channel, 10 MHz, 1, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, mid channel, 10 MHz, 3, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, mid channel, 10 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, mid channel, 3 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, mid channel, 3 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, mid channel, 3 MHz, 6, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, mid channel, 5 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 12 QPSK, mid channel, 5 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 13 16QAM, high channel, 5 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 13 16QAM, high channel, 5 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 13 16QAM, low channel, 5 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 13 16QAM, low channel, 5 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 13 16QAM, mid channel, 10 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 13 16QAM, mid channel, 10 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 13 16QAM, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 13 16QAM, mid channel, 5 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 13 QPSK, high channel, 5 MHz, 1, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 13 QPSK, high channel, 5 MHz, 3, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 13 QPSK, high channel, 5 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 13 QPSK, low channel, 5 MHz, 1, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 13 QPSK, low channel, 5 MHz, 3, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 13 QPSK, low channel, 5 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 13 QPSK, mid channel, 10 MHz, 1, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 13 QPSK, mid channel, 10 MHz, 3, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 13 QPSK, mid channel, 10 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 13 QPSK, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-06-14	Passed	Passed



RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Wideband Signal: 5.2.4.4

OP-Mode	Setup	Date	FCC	IC
Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method				
CAT-M1, eFDD 13 QPSK, mid channel, 5 MHz, 3, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 13 QPSK, mid channel, 5 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 4 16QAM, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, high channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, high channel, 10 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, high channel, 10 MHz, 5, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 4 16QAM, high channel, 3 MHz, 1, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, high channel, 3 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, high channel, 5 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, high channel, 5 MHz, 5, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 4 16QAM, low channel, 1.4 MHz, 1, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, low channel, 1.4 MHz, 5, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, low channel, 10 MHz, 1, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, low channel, 10 MHz, 5, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, low channel, 3 MHz, 1, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, low channel, 3 MHz, 5, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, low channel, 5 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, low channel, 5 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, mid channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, mid channel, 10 MHz, 1, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 4 16QAM, mid channel, 10 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, mid channel, 3 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, mid channel, 3 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 16QAM, mid channel, 5 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 10QAM, find channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, high channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, high channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, high channel, 10 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, high channel, 10 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
-	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, high channel, 10 MHz, 6, conducted CAT-M1, eFDD 4 QPSK, high channel, 3 MHz, 1, conducted	-	2024-05-27		
	S01_BC08		Passed	Passed Passed
CAT M1 eFDD 4 QPSK, high channel, 3 MHz, 6 conducted	S01_BC08	2024-05-27	Passed	
CAT M1 eFDD 4 QPSK, high channel, 3 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed Passed
CAT M1, eFDD 4 QPSK, high channel, 5 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	
CAT-M1, eFDD 4 QPSK, high channel, 5 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, high channel, 5 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, low channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, low channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, low channel, 10 MHz, 1, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 4 QPSK, low channel, 10 MHz, 3, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 4 QPSK, low channel, 10 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, low channel, 3 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, low channel, 3 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed



RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Wideband Signal: 5.2.4.4

OP-Mode	Setup	Date	FCC	IC
Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method				
CAT-M1, eFDD 4 QPSK, low channel, 3 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, low channel, 5 MHz, 1, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 4 QPSK, low channel, 5 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, low channel, 5 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, mid channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, mid channel, 1.4 MHz, 6, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, mid channel, 10 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, mid channel, 10 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, mid channel, 10 MHz, 6, conducted	 S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, mid channel, 3 MHz, 1, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, mid channel, 3 MHz, 3, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, mid channel, 3 MHz, 6, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, mid channel, 5 MHz, 1, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, mid channel, 5 MHz, 3, conducted	S01 BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 4 QPSK, mid channel, 5 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 16QAM, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 16QAM, high channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 16QAM, high channel, 10 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 16QAM, high channel, 10 MHz, 5, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 16QAM, high channel, 3 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 16QAM, high channel, 3 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 16QAM, high channel, 5 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 16QAM, high channel, 5 MHz, 5, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 16QAM, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 16QAM, low channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
			Passed	Passed
CAT-M1, eFDD 66 16QAM, low channel, 10 MHz, 1, conducted CAT-M1, eFDD 66 16QAM, low channel, 10 MHz, 5, conducted	S01_BC08	2024-05-28	Passed	Passed
	S01_BC08	2024-05-28		Passed
CAT M1, eFDD 66 16QAM, low channel, 3 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	
CAT M1, eFDD 66 16QAM, low channel, 3 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 16QAM, low channel, 5 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 16QAM, low channel, 5 MHz, 5, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 16QAM, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 16QAM, mid channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 16QAM, mid channel, 10 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 16QAM, mid channel, 10 MHz, 5, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 16QAM, mid channel, 3 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 16QAM, mid channel, 3 MHz, 5, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 16QAM, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 16QAM, mid channel, 5 MHz, 5, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, high channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, high channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, high channel, 10 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, high channel, 10 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, high channel, 10 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	Passed



RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Final Result

Wideband Signal: 5.2.4.4

OP-Mode	Setup	Date	FCC	IC
Technology, Radio Technology, Operating Frequency, ChBW,	Setup	Date		10
Ressource Blocks, Measurement method				
CAT-M1, eFDD 66 QPSK, high channel, 3 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, high channel, 3 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, high channel, 3 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, high channel, 5 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, high channel, 5 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, high channel, 5 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, low channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, low channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, low channel, 10 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, low channel, 10 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, low channel, 10 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, low channel, 3 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, low channel, 3 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, low channel, 3 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, low channel, 5 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, low channel, 5 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, low channel, 5 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, mid channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, mid channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, mid channel, 10 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, mid channel, 10 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, mid channel, 10 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, mid channel, 3 MHz, 1, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, mid channel, 3 MHz, 3, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, mid channel, 3 MHz, 6, conducted	S01_BC08	2024-05-27	Passed	Passed
CAT-M1, eFDD 66 QPSK, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, mid channel, 5 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	Passed
CAT-M1, eFDD 66 QPSK, mid channel, 5 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	Passed

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RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Final Result

Wideband Signal: 5.2.4.4

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
NB-IoT, eFDD 12 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 12 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 12 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-11	Passed	Passed
NB-IoT, eFDD 12 QPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 12 QPSK, high channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 12 QPSK, high channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 12 QPSK, high channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-29	Passed	Passed



RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Wideband Signal: 5.2.4.4

OP-Mode	Setup	Date	FCC	IC
Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method		2440		
NB-IoT, eFDD 12 QPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 12 QPSK, low channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 12 QPSK, low channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 12 QPSK, low channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 12 QPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 12 QPSK, mid channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 12 QPSK, mid channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 12 QPSK, mid channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 QPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 QPSK, high channel, 0.2 MHz, 12, conducted	S01 BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 QPSK, high channel, 0.2 MHz, 3, conducted	S01 BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 QPSK, high channel, 0.2 MHz, 6, conducted	S01 BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 QPSK, low channel, 0.2 MHz, 1, conducted	 S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 QPSK, low channel, 0.2 MHz, 12, conducted	S01 BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 QPSK, low channel, 0.2 MHz, 3, conducted	S01 BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 QPSK, low channel, 0.2 MHz, 6, conducted	S01 BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 OPSK, mid channel, 0.2 MHz, 1, conducted	S01 BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 QPSK, mid channel, 0.2 MHz, 12, conducted	S01 BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 QPSK, mid channel, 0.2 MHz, 3, conducted	S01 BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 13 QPSK, mid channel, 0.2 MHz, 6, conducted	S01 BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 4 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 4 BPSK, low channel, 0.2 MHz, 1, conducted	S01 BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 4 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 4 QPSK, high channel, 0.2 MHz, 1, conducted	S01 BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 4 QPSK, high channel, 0.2 MHz, 12, conducted	S01 BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 4 QPSK, high channel, 0.2 MHz, 3, conducted	S01 BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 4 QPSK, high channel, 0.2 MHz, 6, conducted	S01 BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 4 QPSK, low channel, 0.2 MHz, 1, conducted	S01 BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 4 QPSK, low channel, 0.2 MHz, 12, conducted	S01 BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 4 QPSK, low channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 4 QPSK, low channel, 0.2 MHz, 6, conducted	S01 BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 4 QPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 4 QPSK, mid channel, 0.2 MHz, 12, conducted	S01 BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 4 QPSK, mid channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 4 QPSK, mid channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	Passed
NB-IoT, eFDD 66 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 66 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 66 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 66 QPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 66 QPSK, high channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 66 QPSK, high channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 66 QPSK, high channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 66 QPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
15 15 7 51 55 66 Qi Sity ion chainlei, 6.2 Phiz, 1, conducted	301_DC00	2021 03 23	1 033Cu	1 43364



RF Output Power

The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Final Result

Wideband Signal: 5.2.4.4

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
NB-IoT, eFDD 66 QPSK, low channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 66 QPSK, low channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 66 QPSK, low channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 66 QPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 66 QPSK, mid channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 66 QPSK, mid channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 66 QPSK, mid channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 85 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-20	Passed	Passed
NB-IoT, eFDD 85 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-20	Passed	Passed
NB-IoT, eFDD 85 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 85 QPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-20	Passed	Passed
NB-IoT, eFDD 85 QPSK, high channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-20	Passed	Passed
NB-IoT, eFDD 85 QPSK, high channel, 0.2 MHz, 3, conducted	S01_BC08	2024-06-20	Passed	Passed
NB-IoT, eFDD 85 QPSK, high channel, 0.2 MHz, 6, conducted	S01_BC08	2024-06-20	Passed	Passed
NB-IoT, eFDD 85 QPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-20	Passed	Passed
NB-IoT, eFDD 85 QPSK, low channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-20	Passed	Passed
NB-IoT, eFDD 85 QPSK, low channel, 0.2 MHz, 3, conducted	S01_BC08	2024-06-20	Passed	Passed
NB-IoT, eFDD 85 QPSK, low channel, 0.2 MHz, 6, conducted	S01_BC08	2024-06-20	Passed	Passed
NB-IoT, eFDD 85 QPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 85 QPSK, mid channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 85 QPSK, mid channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-29	Passed	Passed
NB-IoT, eFDD 85 QPSK, mid channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-29	Passed	Passed

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Emission and occupied bandwidth

The measurement was performed according to ANSI C63.26: 2015; 5.4.3 (relative meas. Procedure [26dB for GSM, EGDE, WCDMA, HSDPA, HSUPA]) 5.4.4 (Power bandwidth (99%))

Final Result

OP-Mode	Setup	Date	FCC	IC
Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	•			
CAT-M1, eFDD 12 16QAM, high channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-17	Passed	Passed
CAT-M1, eFDD 12 16QAM, low channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-17	Passed	Passed
CAT-M1, eFDD 12 16QAM, mid channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-17	Passed	Passed
CAT-M1, eFDD 12 QPSK, high channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 12 QPSK, low channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 12 QPSK, mid channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 4 16QAM, high channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 4 16QAM, low channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 4 16QAM, mid channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 4 QPSK, high channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 4 QPSK, low channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 4 QPSK, mid channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	Passed
CAT-M1, eFDD 66 16QAM, high channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-17	Passed	Passed
CAT-M1, eFDD 66 16QAM, low channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-17	Passed	Passed
CAT-M1, eFDD 66 16QAM, mid channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-17	Passed	Passed



47 CFR CHAPTER I FCC PART 27 Subpart C § 2.1049

Emission and occupied bandwidth

The measurement was performed according to ANSI C63.26: 2015; 5.4.3 (relative meas. Procedure [26dB for GSM, EGDE, WCDMA, HSDPA, HSUPA]) 5.4.4 (Power bandwidth (99%))

Final Result

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
CAT-M1, eFDD 66 QPSK, high channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-17	Passed	Passed
CAT-M1, eFDD 66 QPSK, low channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-17	Passed	Passed
CAT-M1, eFDD 66 QPSK, mid channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-17	Passed	Passed

47 CFR CHAPTER I FCC PART 27 Subpart C § 2.1049

Emission and occupied bandwidth

The measurement was performed according to ANSI C63.26: 2015; 5.4.3 (relative meas. Procedure [26dB for GSM, EGDE, WCDMA, HSDPA, HSUPA]) 5.4.4 (Power bandwidth (99%))

Final Result

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
NB-IoT, eFDD 12 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 12 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 12 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 12 QPSK, high channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 12 QPSK, low channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 12 QPSK, mid channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 13 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 13 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 13 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 13 QPSK, high channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 13 QPSK, low channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 13 QPSK, mid channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 4 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 4 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 4 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 4 QPSK, high channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 4 QPSK, low channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 4 QPSK, mid channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 66 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 66 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 66 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 66 QPSK, high channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 66 QPSK, low channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 66 QPSK, mid channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 85 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 85 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 85 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 85 QPSK, high channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 85 QPSK, low channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed
NB-IoT, eFDD 85 QPSK, mid channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	Passed



RF Output Power The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, Wideband Signal: 5.2.4.4				Final Result	
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC	
CAT-M1, eFDD 8 16QAM, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 16QAM, high channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 16QAM, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 16QAM, low channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 16QAM, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 16QAM, mid channel, 1.4 MHz, 5, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 16QAM, mid channel, 3 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 16QAM, mid channel, 3 MHz, 5, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 QPSK, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 QPSK, high channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 QPSK, high channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 QPSK, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 QPSK, low channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 QPSK, low channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 QPSK, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 QPSK, mid channel, 1.4 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 QPSK, mid channel, 1.4 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 QPSK, mid channel, 3 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 QPSK, mid channel, 3 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	N/A	
CAT-M1, eFDD 8 QPSK, mid channel, 3 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	N/A	

47 CFR CHAPTER I FCC PART 27 Subpart P § 2.1046 § 27.1507

RF Output Power	
The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1,	Final Result
Wideband Signal: 5.2.4.4	

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
NB-IoT, eFDD 8 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	N/A
NB-IoT, eFDD 8 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	N/A
NB-IoT, eFDD 8 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	N/A
NB-IoT, eFDD 8 QPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	N/A
NB-IoT, eFDD 8 QPSK, high channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-28	Passed	N/A
NB-IoT, eFDD 8 QPSK, high channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	N/A
NB-IoT, eFDD 8 QPSK, high channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	N/A
NB-IoT, eFDD 8 QPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	N/A
NB-IoT, eFDD 8 QPSK, low channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-28	Passed	N/A
NB-IoT, eFDD 8 QPSK, low channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	N/A
NB-IoT, eFDD 8 QPSK, low channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	N/A
NB-IoT, eFDD 8 QPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-05-28	Passed	N/A
NB-IoT, eFDD 8 QPSK, mid channel, 0.2 MHz, 12, conducted	S01_BC08	2024-05-28	Passed	N/A
NB-IoT, eFDD 8 QPSK, mid channel, 0.2 MHz, 3, conducted	S01_BC08	2024-05-28	Passed	N/A
NB-IoT, eFDD 8 QPSK, mid channel, 0.2 MHz, 6, conducted	S01_BC08	2024-05-28	Passed	N/A



Final Result

47 CFR CHAPTER I FCC PART 27 Subpart P	§ 2.1049 § 27.1506
Emission and occupied handwidth	

The measurement was performed according to ANSI C63.26: 2015; 5.4.3 (relative meas. Procedure [26dB for GSM, EGDE, WCDMA, HSDPA, HSUPA]) 5.4.4 (Power bandwidth (99%))		Final Re	sult		
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC	
CAT-M1, eFDD 8 16QAM, high channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-14	Passed	N/A	

Ressource Blocks, Measurement method				
CAT-M1, eFDD 8 16QAM, high channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-14	Passed	N/A
CAT-M1, eFDD 8 16QAM, low channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-14	Passed	N/A
CAT-M1, eFDD 8 16QAM, mid channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-14	Passed	N/A
CAT-M1, eFDD 8 QPSK, high channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	N/A
CAT-M1, eFDD 8 QPSK, low channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	N/A
CAT-M1, eFDD 8 QPSK, mid channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-14	Passed	N/A

47 CFR CHAPTER I FCC PART 27 Subpart P § 2.1049 § 27.1506

Emission and occupied bandwidth The measurement was performed according to ANSI C63.26: 2015; 5.4.3

])

OD W. I.		
(relative meas. Procedure [26dB for GSM, EGDE, WCDMA, H 5.4.4 (Power bandwidth (99%))	ISDPA, HS	UPA])
The measurement was performed according to fine coste	. 2010, 0.	

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
NB-IoT, eFDD 8 BPSK, high channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	N/A
NB-IoT, eFDD 8 BPSK, low channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	N/A
NB-IoT, eFDD 8 BPSK, mid channel, 0.2 MHz, 1, conducted	S01_BC08	2024-06-17	Passed	N/A
NB-IoT, eFDD 8 QPSK, high channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	N/A
NB-IoT, eFDD 8 QPSK, low channel, 0.2 MHz, 12, conducted	S01_BC08	2024-06-17	Passed	N/A
NB-IoT, eFDD 8 QPSK, mid channel, 0.2 MHz, 12, conducted	S01 BC08	2024-06-17	Passed	N/A

47 CFR CHAPTER I FCC PART 90 Subpart S § 2.1046 § 90.635

RF Output Power	
The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1,	Final Result
Wideband Signal: 5.2.4.4	

OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC
CAT-M1, eFDD 26 16QAM, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-06-13	Passed	N/A
CAT-M1, eFDD 26 16QAM, high channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-13	Passed	N/A
CAT-M1, eFDD 26 16QAM, high channel, 5 MHz, 1, conducted	S01_BC08	2024-06-13	Passed	N/A
CAT-M1, eFDD 26 16QAM, high channel, 5 MHz, 5, conducted	S01_BC08	2024-06-13	Passed	N/A
CAT-M1, eFDD 26 16QAM, low channel, 1.4 MHz, 1, conducted	S01_BC08	2024-06-13	Passed	N/A
CAT-M1, eFDD 26 16QAM, low channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-13	Passed	N/A
CAT-M1, eFDD 26 16QAM, low channel, 5 MHz, 1, conducted	S01_BC08	2024-06-13	Passed	N/A
CAT-M1, eFDD 26 16QAM, low channel, 5 MHz, 5, conducted	S01_BC08	2024-06-13	Passed	N/A
CAT-M1, eFDD 26 16QAM, mid channel, 1.4 MHz, 1, conducted	S01_BC08	2024-06-13	Passed	N/A
CAT-M1, eFDD 26 16QAM, mid channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-13	Passed	N/A
CAT-M1, eFDD 26 16QAM, mid channel, 10 MHz, 1, conducted	S01_BC08	2024-06-13	Passed	N/A
CAT-M1, eFDD 26 16QAM, mid channel, 10 MHz, 5, conducted	S01_BC08	2024-06-13	Passed	N/A
CAT-M1, eFDD 26 16QAM, mid channel, 5 MHz, 1, conducted	S01_BC08	2024-06-13	Passed	N/A
CAT-M1, eFDD 26 16QAM, mid channel, 5 MHz, 5, conducted	S01_BC08	2024-06-13	Passed	N/A
CAT-M1, eFDD 26 QPSK, high channel, 1.4 MHz, 1, conducted	S01_BC08	2024-06-13	Passed	N/A



47 CFR CHAPTER I FCC PART 90 Subpart S § 2.1046 § 90.635

RF Output Power The measurement was performed according to ANSI C63.26: 2015; 5.2.4.1, **Final Result** Wideband Signal: 5.2.4.4 Setup Date **FCC** IC Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method CAT-M1, eFDD 26 QPSK, high channel, 1.4 MHz, 3, conducted S01_BC08 2024-06-13 Passed N/A CAT-M1, eFDD 26 QPSK, high channel, 1.4 MHz, 6, conducted S01_BC08 2024-06-13 Passed N/A CAT-M1, eFDD 26 QPSK, high channel, 5 MHz, 1, conducted S01_BC08 2024-06-13 Passed N/A CAT-M1, eFDD 26 QPSK, high channel, 5 MHz, 3, conducted S01_BC08 2024-06-13 Passed N/A CAT-M1, eFDD 26 QPSK, high channel, 5 MHz, 6, conducted S01_BC08 Passed 2024-06-13 N/A CAT-M1, eFDD 26 QPSK, low channel, 1.4 MHz, 1, conducted S01 BC08 2024-06-20 Passed N/A CAT-M1, eFDD 26 QPSK, low channel, 1.4 MHz, 3, conducted S01_BC08 2024-06-13 Passed N/A CAT-M1, eFDD 26 QPSK, low channel, 1.4 MHz, 6, conducted S01 BC08 2024-06-13 Passed N/A CAT-M1, eFDD 26 QPSK, low channel, 5 MHz, 1, conducted S01_BC08 2024-06-13 Passed N/A CAT-M1, eFDD 26 QPSK, low channel, 5 MHz, 3, conducted S01_BC08 2024-06-13 Passed N/A CAT-M1, eFDD 26 QPSK, low channel, 5 MHz, 6, conducted S01_BC08 2024-06-13 Passed N/A CAT-M1, eFDD 26 QPSK, mid channel, 1.4 MHz, 1, conducted S01 BC08 2024-06-13 Passed N/A CAT-M1, eFDD 26 QPSK, mid channel, 1.4 MHz, 3, conducted S01 BC08 2024-06-13 Passed N/A CAT-M1, eFDD 26 QPSK, mid channel, 1.4 MHz, 6, conducted S01 BC08 2024-06-13 Passed N/A CAT-M1, eFDD 26 QPSK, mid channel, 10 MHz, 1, conducted S01_BC08 2024-06-13 Passed N/A CAT-M1, eFDD 26 QPSK, mid channel, 10 MHz, 3, conducted S01_BC08 Passed N/A 2024-06-13 CAT-M1, eFDD 26 QPSK, mid channel, 10 MHz, 6, conducted S01_BC08 2024-06-13 Passed N/A CAT-M1, eFDD 26 QPSK, mid channel, 5 MHz, 1, conducted 2024-06-13 S01_BC08 Passed N/A CAT-M1, eFDD 26 QPSK, mid channel, 5 MHz, 3, conducted S01 BC08 2024-06-13 Passed N/A

S01_BC08

2024-06-13

Passed

N/A

CAT-M1, eFDD 26 QPSK, mid channel, 5 MHz, 6, conducted



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Emission and occupied bandwidth The measurement was performed according to ANSI C63. (relative meas. Procedure [26dB for GSM, EGDE, WCDMA, 5.4.4 (Power bandwidth (99%))	•		Final Re	sult	
OP-Mode Technology, Radio Technology, Operating Frequency, ChBW, Ressource Blocks, Measurement method	Setup	Date	FCC	IC	
CAT-M1, eFDD 26 16QAM, high channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-17	Passed	N/A	
CAT-M1, eFDD 26 16QAM, low channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-17	Passed	N/A	
CAT-M1, eFDD 26 16QAM, mid channel, 1.4 MHz, 5, conducted	S01_BC08	2024-06-17	Passed	N/A	
CAT-M1, eFDD 26 QPSK, high channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-17	Passed	N/A	
CAT-M1, eFDD 26 QPSK, low channel, 1.4 MHz, 6, conducted	S01_BC08	2024-06-17	Passed	N/A	
CAT-M1, eFDD 26 OPSK, mid channel, 1.4 MHz, 6, conducted	S01 BC08	2024-06-17	Passed	N/A	

N/A: Not applicable N/P: Not performed



2 REVISION HISTORY / SIGNATURES

		Report version control	
Version	Release date	Change Description	Version validity
initial	2024-08-01		valid

COMMENT: Test plan is based on class 2 permissive change. Therefore not all tests were performed. Initial test report covering all tests: MDE_UBLOX_2005_FCC_01_REV04 dated 2021-03-15.

(responsible for accreditation scope)

Dipl.-Ing. Daniel Gall

(responsible for testing and report)

B.Sc. Mohamed Fraitat

7 layers GmbH, Borsigstr. 11 40880 Ratingen, Germany

Phone +49 (0)2102 749 0



3 ADMINISTRATIVE DATA

3.1 TESTING LABORATORY

Company Name: 7layers GmbH

Address: Borsigstr. 11

40880 Ratingen

Germany

The test facility is accredited by the following accreditation organisation:

Laboratory accreditation no: DAkkS D-PL-12140-00

FCC Designation Number: DE0015

FCC Test Firm Registration: 929146

ISED CAB Identifier DE0007; ISED#: 3699A

Responsible for accreditation scope: Dipl.-Ing. Daniel Gall

Report Template Version: 2023-09-29

3.2 PROJECT DATA

Responsible for testing and report: B.Sc. Mohamed Fraitat

Employees who performed the tests: documented internally at 7Layers

Date of Report: 2024-08-01

Testing Period: 2024-05-22 to 2024-06-20

3.3 APPLICANT DATA

Company Name: u-blox AG

Address: Zürcherstrasse 68, 8800 Thalwil

Switzerland

Contact Person: Giulio Comar

3.4 MANUFACTURER DATA

Company Name: please see Applicant Data

Address:

Contact Person:



4 TEST OBJECT DATA

4.1 GENERAL EUT DESCRIPTION

Kind of Device product description	LTE CAT M1/ NB-IoT/ EGPRS Module
Product name	SARA-R422M10S
Туре	SARA-R422M10S
Declared EUT data by	the supplier
General product description	The EUT is a LTE CAT-M1 / NB-IoT EGPRS module. It supports the following relevant bands for FCC/ISED approval:
	GSM/EDGE: 850 / 1900
	CAT-M1:
	eFDD2 / eFDD4 / eFDD5 / eFDD8 / eFDD12 / eFDD13 / eFDD25 / eFDD26 / eFDD66
	NB-IoT:
	eFDD2 / eFDD4 / eFDD5 / eFDD8 / eFDD12 / eFDD13 / eFDD66 / eFDD85
Voltage Level	3.8 V
Voltage Type	DC

4.2 EUT MAIN COMPONENTS

Sample Name	Sample Code	Description	
bc08	DE1015154bc08	RF Sample	
Sample Parameter		Value	
Serial No.	351166706376443		
HW Version	UBX-3602A2		
SW Version	01.24,A01.20		
Comment	-		

NOTE: The short description is used to simplify the identification of the EUT in this test report.

4.3 ANCILLARY EQUIPMENT

For the purposes of this test report, ancillary equipment is defined as equipment which is used in conjunction with the EUT to provide operational and control features to the EUT. It is necessary to configure the system in a typical fashion, as a customer would normally use it. But nevertheless Ancillary Equipment can influence the test results.

Device	Details (Manufacturer, Type Model, OUT Code)	Description
-	-	-



4.4 AUXILIARY EQUIPMENT

For the purposes of this test report, auxiliary equipment is defined as equipment which is used temporarily to enable operational and control features especially used for the tests of the EUT which is not used during normal operation or equipment that is used during the tests in combination with the EUT but is not subject of this test report. It is necessary to configure the system in a typical fashion, as a customer would normally use it. But nevertheless Auxiliary Equipment can influence the test results.

Device	Details (Manufacturer, Type Model, HW, SW, S/N)	Description
AUX1	UNIFIVE, UUX324-1215, -, -, F04-0269354	AC/DC Adapter
AUX2	Ublox, EVB-WL3, -, -, -	Evaluation Board

4.5 EUT SETUPS

This chapter describes the combination of EUTs and equipment used for testing. The rationale for selecting the EUTs, ancillary and auxiliary equipment and interconnecting cables, is to test a representative configuration meeting the requirements of the referenced standards.

Setup	Combination of EUTs	Description and Rationale
S01_BC08	bc08, AUX1, AUX2	RF conducted setup



4.6 OPERATING MODES / TEST CHANNELS

This chapter describes the operating modes of the EUTs used for testing.

		LOW	MID	HIGH
GSM /	Cell BW [MHz]	0.2	0.2	0.2
EDGE 850	CH no.	128	190	251
	f [MHz]	824.2	836.6	848.8

		LOW	MID	HIGH
GSM /	Cell BW [MHz]	0.2	0.2	0.2
EDGE 1900	CH no.	512	661	810
	f [MHz]	1850.2	1880.0	1909.8

		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
	Cell BW [MHz]	1.4	1.4	1.4	3	3	3	5	5	5
	CH no.	18607	18900	19193	18615	18900	19185	18625	18900	19175
	f [MHz]	1850.7	1880.0	1909.3	1851.5	1880.0	1908.5	1852.5	1880.0	1907.5
CAT-M1		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
eFDD 2	Cell BW [MHz]	10	10	10	I	-	-	-	-	-
	CH no.	18650	18900	19150	I	-	-	-	-	-
	f [MHz]	1855.0	1880.0	1905.0	-	-	-	-	-	-

		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
	Cell BW [MHz]	1.4	1.4	1.4	3	3	3	5	5	5
	CH no.	19957	20175	20393	19965	20175	20385	19975	20175	20375
	f [MHz]	1710.7	1732.5	1754.3	1711.5	1732.5	1753.5	1712.5	1732.5	1752.5
CAT-M1		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
eFDD 4	Cell BW [MHz]	10	10	10	-	-	-	-	-	-
	CH no.	20000	20175	20350	-	-	-	-	-	-
	f [MHz]	1715.0	1732.5	1750.0	-	-	-	1	-	-

		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
	Cell BW [MHz]	1.4	1.4	1.4	3	3	3	5	5	5
	CH no.	20407	20525	20643	20415	20525	20635	20425	20525	20625
	f [MHz]	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5
CAT-M1		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
eFDD 5	Cell BW [MHz]	10	10	10	-	-	-	-	-	-
	CH no.	20450	20525	20600	ı	-	-	1	-	-
	f [MHz]	829.0	836.5	844.0	-	-	-	1	-	-

		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
	Cell BW [MHz]	1.4	1.4	1.4	-	3	-	-	-	-
	CH no.	21632	21640	21648	-	20525	-	-	-	-
	f [MHz]	898.2	899.0	899.8	-	899.0	-	-	-	-
CAT-M1		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
eFDD 8	Cell BW [MHz]	-	-	-	-	-	-	-	-	-
	CH no.	-	-	-	ı	-	-	-	-	-
	f [MHz]	-	-	-	ı	-	-	-	-	-

		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
	Cell BW [MHz]	1.4	1.4	1.4	3	3	3	5	5	5
	CH no.	23017	23095	23173	23025	23095	23165	23035	23095	23155
	f [MHz]	699.7	707.5	715.3	700.5	707.5	714.5	701.5	707.5	713.5
CAT-M1		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
eFDD 12	Cell BW [MHz]	10	10	10	-	-	-	-	-	-
	CH no.	23060	23095	23130	-	-	-	-	-	-
	f [MHz]	704.0	707.5	711.0	-	-	-	-	-	



		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
	Cell BW [MHz]	5	5	5	10	10	10	ı	-	-
	CH no.	23205	23230	23255	-	23230	1	ı	-	-
	f [MHz]	779.5	782.0	784.5	-	782.0	1	ı	-	-
CAT-M1		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
eFDD 13	Cell BW [MHz]	-		-	-	-	-	-	-	-
	CH no.	-	-	-	-	-	-	-	-	-
	f [MHz]	-	-	-	-	-	-	-	-	-

		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
	Cell BW [MHz]	1.4	1.4	1.4	3	3	3	5	5	5
	CH no.	26047	26365	26683	26055	26365	26675	26065	26365	26665
	f [MHz]	1850.7	1882.5	1914.3	1851.5	1882.5	1913.5	1852.5	1882.5	1912.5
CAT-M1		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
eFDD 25	Cell BW [MHz]	10	10	10	-	-	-	-	-	-
	CH no.	26090	26365	26640	-	-	-	-	-	-
	f [MHz]	1855.0	1882.5	1910.0	-	-	-	-	-	-

		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
	Cell BW [MHz]	1.4	1.4	1.4	3	3	3	5	5	5
	CH no.	26797	26915	27033	26805	26915	27025	26815	26915	27015
CAT-M1	f [MHz]	824.7	836.5	848.3	825.5	836.5	847.5	826.5	836.5	846.5
eFDD 26		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
(Part 22)	Cell BW [MHz]	10	10	10	-	-	-	-	-	-
	CH no.	26840	26915	26990	-	-	-	-	-	-
	f [MHz]	829.0	836.5	844.0	1	-	-	-	-	-

		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
	Cell BW [MHz]	1.4	1.4	1.4	3	3	3	5	5	5
	CH no.	26697	26740	26783	26705	26740	26776	26715	26740	26766
CAT-M1	f [MHz]	814.7	819.0	823.3	815.5	819.0	822.5	816.5	819.0	821.5
eFDD 26		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
(Part 90)	Cell BW [MHz]	-	10	-	-	-	-	-	-	-
	CH no.	-	26740	-	-	-	-	-	-	-
	f [MHz]	-	819.0	-	-	-	-	-	-	-

		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
	Cell BW [MHz]	1.4	1.4	1.4	3	3	3	5	5	5
	CH no.	131979	132322	132665	131987	132322	132657	131997	132322	132647
	f [MHz]	1710.7	1745.0	1779.3	1711.5	1745.0	1778.5	1712.5	1745.0	1777.5
CAT-M1		LOW	MID	HIGH	LOW	MID	HIGH	LOW	MID	HIGH
eFDD 66	Cell BW [MHz]	10	10	10	-	-	-	1	ı	-
	CH no.	132022	132322	132622	-	-	-	1	ı	-
	f [MHz]	1715.0	1745.0	1775.0	-	-	-	1	ı	-

		LOW	MID	HIGH
NB-IoT	Cell BW [MHz]	0.2	0.2	0.2
eFDD 2	CH no.	18601	18900	19199
	f [MHz]	1850.1	1880.0	1909.9

		LOW	MID	HIGH
NB-IoT	Cell BW [MHz]	0.2	0.2	0.2
eFDD 4	CH no.	19951	20175	20399
	f [MHz]	1710.1	1745.5	1754.9

		LOW	MID	HIGH
NB-IoT	Cell BW [MHz]	0.2	0.2	0.2
eFDD 5	CH no.	20401	20525	20649
	f [MHz]	824.1	836.5	848.9



		LOW	MID	HIGH
NB-IoT	Cell BW [MHz]	0.2	0.2	0.2
eFDD 8	CH no.	21626	21640	21654
	f [MHz]	897.6	899.0	900.4

		LOW	MID	HIGH
NB-IoT	Cell BW [MHz]	0.2	0.2	0.2
eFDD 12	CH no.	23011	23095	23178
	f [MHz]	699.1	707.5	715.8

		LOW	MID	HIGH
NB-IoT	Cell BW [MHz]	0.2	0.2	0.2
eFDD 13	CH no.	23181	23230	23279
	f [MHz]	777.1	782.0	786.9

		LOW	MID	HIGH
NB-IoT	Cell BW [MHz]	0.2	0.2	0.2
eFDD 66	CH no.	131973	132322	132671
	f [MHz]	1710.1	1745.0	1779.9

		LOW	MID	HIGH
NB-IoT	Cell BW [MHz]	0.2	0.2	0.2
eFDD 85	CH no.	134004	134092	134180
	f [MHz]	698.2	707.0	715.8

4.7 PRODUCT LABELLING

4.7.1 FCC ID LABEL

Please refer to the documentation of the applicant.

4.7.2 LOCATION OF THE LABEL ON THE EUT

Please refer to the documentation of the applicant.



5 TEST RESULTS

5.1 RF OUTPUT POWER

Standard FCC PART 22 Subpart H

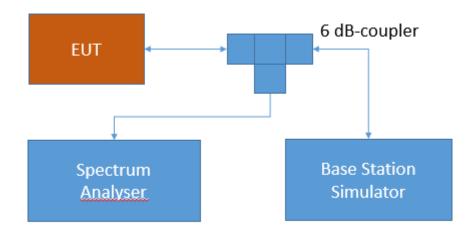
The test was performed according to:

ANSI C63.26: 2015; 5.2.4.1 Narrowband Signal: 5.2.4.3.3

5.1.1 TEST DESCRIPTION

This test case is intended to demonstrate compliance to the applicable RF Output power test case per § 2.1046 and RSS-GEN 6.12. The limit and the requirements come from the applicable rule part and ISED RSS-Standard for the operating band of the cellular device.

The EUT was connected to the test setup according to the following diagram:



Test Setup FCC Part 22/24/27/90 Cellular; RF Output power

The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.

5.1.2 TEST REQUIREMENTS / LIMITS

FCC Part 22, § 22.913

- (a) Maximum ERP. The ERP of transmitters in the Cellular Radiotelephone Service must not exceed the limits in this section.
- (5) The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

TEST REPORT REFERENCE: MDE_UBLOX_2401_FCC_01 Page 38 of 137



RSS-132; 5.4 Transmitter Output Power and Equivalent Isotropically Radiated Power

The transmitter output power shall be measured in terms of average power. The equivalent radiated power (e.r.p.) shall not exceed 7 watts for mobile equipment and 3 watts for portable equipment.

5.1.3 TEST PROTOCOL

Ambient temperature: 20 - 28 °C Relative humidity: 30 - 40 %

	Radio chnology	Channel	Ressource Blocks / Subcarrier	Band- width [MHz]	Peak Cond. Power [dBm]	Average Cond. Power [dBm]	RMS Cond. Power [dBm]	FCC ERP Limit [W]	IC ERP Limit [W]	Max. Antenna Gain FCC [dBd]	Max. Antenna Gain IC [dBd]
GSM	GSM 850 GPRS	low	-	0.2	32.00	30.53	30.93	7	7	7.52	7.52
GSM	GSM 850 GPRS	mid	-	0.2	32.11	30.64	30.99	7	7	7.46	7.46
GSM	GSM 850 GPRS	high	-	0.2	32.13	30.65	31.07	7	7	7.45	7.45
GSM	GSM 850 EDGE	low	-	0.2	29.57	26.38	27.07	7	7	11.38	11.38
GSM	GSM 850 EDGE	mid	-	0.2	29.56	26.63	27.05	7	7	11.40	11.40
GSM	GSM 850 EDGE	high	-	0.2	29.56	26.65	27.02	7	7	11.43	11.43

Remarks:

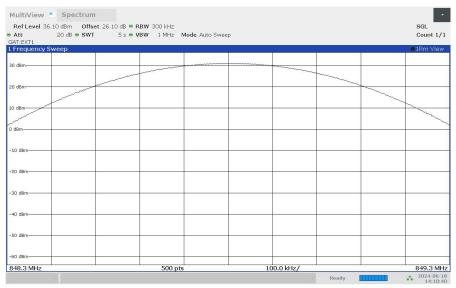
Please see next sub-clause for the measurement plot.

The max. antenna gain is regarding the output power not SAR / MPE.



5.1.4 MEASUREMENT PLOT (EXAMPLE PLOT, SHOWING WORST CASE, IF APPLICABLE)

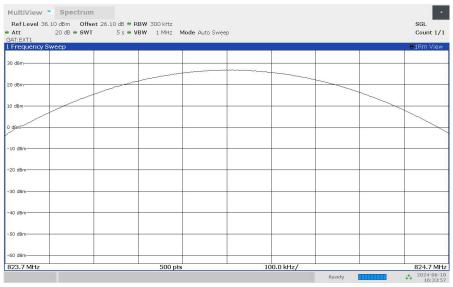
Technology = GPRS, Radio Technology = GPRS 850, Operating Frequency = high channel (S01_BC08)



02:10:41 PM 06/18/2024

maximum value 31.07dBm measured at 848.8MHz

Technology = EDGE, Radio Technology = EDGE 850, Operating Frequency = low channel (S01_BC08)



04:33:57 PM 06/18/2024

maximum value 27.07dBm measured at 824.2MHz

5.1.5 TEST EQUIPMENT USED



5.2 RF OUTPUT POWER

Standard FCC PART 22 Subpart H

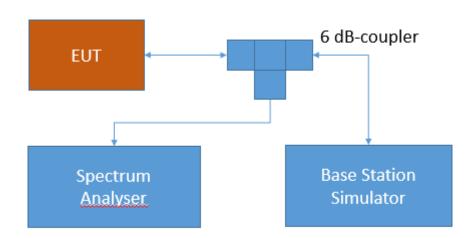
The test was performed according to:

ANSI C63.26: 2015; 5.2.4.1, Wideband Signal: 5.2.4.4

5.2.1 TEST DESCRIPTION

This test case is intended to demonstrate compliance to the applicable RF Output power test case per § 2.1046 and RSS-GEN 6.12. The limit and the requirements come from the applicable rule part and ISED RSS-Standard for the operating band of the cellular device.

The EUT was connected to the test setup according to the following diagram:



Test Setup FCC Part 22/24/27/90 Cellular; RF Output power

The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.

5.2.2 TEST REQUIREMENTS / LIMITS

FCC Part 22, § 22.913

- (a) *Maximum ERP*. The ERP of transmitters in the Cellular Radiotelephone Service must not exceed the limits in this section.
- (5) The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

TEST REPORT REFERENCE: MDE_UBLOX_2401_FCC_01 Page 41 of 137



RSS-132; 5.4 Transmitter Output Power and Equivalent Isotropically Radiated Power

The transmitter output power shall be measured in terms of average power. The equivalent radiated power (e.r.p.) shall not exceed 7 watts for mobile equipment and 3 watts for portable equipment.

5.2.3 TEST PROTOCOL

Ambient temperature: 20 - 28 °C Relative humidity: 30 - 40 %

Radio 1	Technology	Channel	Ressource Blocks / Subcarrier	Band- width [MHz]	Peak Cond. Power [dBm]	Average Cond. Power [dBm]	RMS Cond. Power [dBm]	FCC ERP Limit [W]	IC ERP Limit [W]	Max. Antenna Gain FCC [dBd]	Max. Antenna Gain IC [dBd]
CAT- M1	eFDD 5 QPSK	low	1	1.4	-	-	22.38	7	7	16.07	16.07
CAT- M1	eFDD 5 QPSK	low	3	1.4	-	-	21.55	7	7	16.90	16.90
CAT- M1	eFDD 5 QPSK	low	6	1.4	-	-	20.56	7	7	17.89	17.89
CAT- M1	eFDD 5 QPSK	mid	1	1.4	-	-	22.46	7	7	15.99	15.99
CAT- M1	eFDD 5 QPSK	mid	3	1.4	-	-	21.43	7	7	17.02	17.02
CAT- M1	eFDD 5 QPSK	mid	6	1.4	-	-	20.62	7	7	17.83	17.83
CAT- M1	eFDD 5 QPSK	high	1	1.4	-	-	22.40	7	7	16.05	16.05
CAT-	eFDD 5	high	3	1.4	-	-	21.54	7	7	16.91	16.91
M1 CAT-	QPSK eFDD 5	high	6	1.4	-	-	20.53	7	7	17.92	17.92
M1 CAT-	QPSK eFDD 5	low	1	1.4	-	-	21.34	7	7	17.11	17.11
CAT-	16QAM eFDD 5	low	5	1.4	-	-	20.64	7	7	17.81	17.81
M1 CAT-	16QAM eFDD 5	mid	1	1.4	-	-	21.38	7	7	17.07	17.07
M1 CAT-	16QAM eFDD 5	mid	5	1.4	-	-	20.69	7	7	17.76	17.76
M1 CAT-	16QAM eFDD 5	high	1	1.4	-	-	21.52	7	7	16.93	16.93
M1 CAT-	16QAM eFDD 5	high	5	1.4	-	-	20.70	7	7	17.75	17.75
M1 CAT-	16QAM eFDD 5	low	1	3	-	-	22.60	7	7	15.85	15.85
M1 CAT-	QPSK eFDD 5	low	3	3	-	-	21.53	7	7	16.92	16.92
M1 CAT-	QPSK eFDD 5	low	6	3	-	-	20.59	7	7	17.86	17.86
M1 CAT-	QPSK eFDD 5	mid	1	3	-	-	22.54	7	7	15.91	15.91
M1 CAT-	QPSK eFDD 5	mid	3	3	-	-	21.56	7	7	16.89	16.89
M1 CAT-	QPSK eFDD 5	mid	6	3	-	-	20.57	7	7	17.88	17.88
M1 CAT-	QPSK eFDD 5	high	1	3	-	-	22.52	7	7	15.93	15.93
M1 CAT-	QPSK eFDD 5	high	3	3	-	-	21.55	7	7	16.90	16.90
M1 CAT-	QPSK eFDD 5	high	6	3	-	-	20.51	7	7	17.94	17.94
M1 CAT-	QPSK eFDD 5	low	1	3	-	-	21.58	7	7	16.87	16.87
M1 CAT-	16QAM eFDD 5	low	5	3	-	-	20.56	7	7	17.89	17.89
M1 CAT-	16QAM eFDD 5	mid	1	3	-	-	21.52	7	7	16.93	16.93
M1 CAT-	16QAM eFDD 5	mid	5	3	-	-	20.54	7	7	17.91	17.91
M1 CAT-	16QAM eFDD 5	high	1	3	-	-			7		
M1	16QAM	J					21.65	7	/	16.80	16.80



CAT- M1	eFDD 5 16QAM	high	5	3	-	-	20.54	7	7	17.91	17.91
CAT- M1	eFDD 5 QPSK	low	1	5	-	-	22.62	7	7	15.83	15.83
CAT-	eFDD 5	low	3	5	-	-	21.37	7	7	17.08	17.08
CAT-	QPSK eFDD 5	low	6	5	-	-	21.52	7	7	16.93	16.93
M1 CAT-	QPSK eFDD 5	mid	1	5	-	-	22.57	7	7	15.88	15.88
M1 CAT-	QPSK eFDD 5	mid	3	5	-	-					
M1 CAT-	QPSK eFDD 5	mid	6	5	_	-	21.44	7	7	17.01	17.01
M1 CAT-	QPSK eFDD 5	high	1	5	_	-	21.54	7	7	16.91	16.91
M1	QPSK	_			_	_	22.46	7	7	15.99	15.99
CAT- M1	eFDD 5 QPSK	high	3	5			21.54	7	7	16.91	16.91
CAT- M1	eFDD 5 QPSK	high	6	5	-	-	21.48	7	7	16.97	16.97
CAT- M1	eFDD 5 16QAM	low	1	5	-	-	22.43	7	7	16.02	16.02
CAT- M1	eFDD 5 16QAM	low	5	5	-	-	20.59	7	7	17.86	17.86
CAT- M1	eFDD 5 16QAM	mid	1	5	-	-	22.57	7	7	15.88	15.88
CAT- M1	eFDD 5 16QAM	mid	5	5	-	-	20.62	7	7	17.83	17.83
CAT- M1	eFDD 5 16QAM	high	1	5	-	-	22.38	7	7	16.07	16.07
CAT-	eFDD 5	high	5	5	-	-	20.54	7	7	17.91	17.91
CAT-	16QAM eFDD 5	low	1	10	-	-	22.77	7	7	15.68	15.68
M1 CAT-	QPSK eFDD 5	low	3	10	-	-	22.50	7	7	15.95	15.95
M1 CAT-	QPSK eFDD 5	low	6	10	-	-	21.57	7	7	16.88	16.88
M1 CAT-	QPSK eFDD 5	mid	1	10	-	-					
M1 CAT-	QPSK eFDD 5	mid	3	10	_	-	22.72	7	7	15.73	15.73
M1 CAT-	QPSK eFDD 5	mid	6	10	_	_	22.58	7	7	15.87	15.87
M1 CAT-	QPSK eFDD 5		1	10	_	-	21.55	7	7	16.90	16.90
M1	QPSK	high					22.32	7	7	16.13	16.13
CAT- M1	eFDD 5 QPSK	high	3	10	-	-	22.62	7	7	15.83	15.83
CAT- M1	eFDD 5 QPSK	high	6	10	-	-	21.48	7	7	16.97	16.97
CAT- M1	eFDD 5 16QAM	low	1	10	-	-	22.59	7	7	15.86	15.86
CAT- M1	eFDD 5 16QAM	low	5	10	-	-	21.67	7	7	16.78	16.78
CAT- M1	eFDD 5 16QAM	mid	1	10	-	-	22.72	7	7	15.73	15.73
CAT- M1	eFDD 5 16QAM	mid	5	10	-	-	21.62	7	7	16.83	16.83
CAT- M1	eFDD 5 16QAM	high	1	10	-	-	22.17	7	7	16.28	16.28
CAT-	eFDD 5	high	5	10	-	-	21.48	7	7	16.97	16.97
CAT-	16QAM eFDD 26	low	1	1.4	-	-	24.48	7	7	13.97	13.97
CAT-	QPSK eFDD 26	low	3	1.4	-	-	22.07	7	7	16.38	16.38
M1 CAT-	QPSK eFDD 26	low	6	1.4	-	-	20.90	7	7	17.55	17.55
M1 CAT-	QPSK eFDD 26	mid	1	1.4	-	-	22.90	7	7		15.55
M1 CAT-	QPSK eFDD 26	mid	3	1.4	-	-				15.55	
M1 CAT-	QPSK eFDD 26	mid	6	1.4	_	-	22.02	7	7	16.43	16.43
M1 CAT-	QPSK eFDD 26	high	1	1.4	_	-	20.95	7	7	17.50	17.50
M1	QPSK	_	3				22.89	7	7	15.56	15.56
CAT-	eFDD 26 QPSK	high		1.4	-	-	22.03	7	7	16.42	16.42
CAT- M1	eFDD 26 QPSK	high	6	1.4	-	-	20.97	7	7	17.48	17.48
CAT- M1	eFDD 26 16QAM	low	1	1.4	-	-	22.02	7	7	16.43	16.43
CAT- M1	eFDD 26 16QAM	low	5	1.4	-	-	21.10	7	7	17.35	17.35
CAT- M1	eFDD 26 16QAM	mid	1	1.4	-	-	21.78	7	7	16.67	16.67
CAT- M1	eFDD 26 16QAM	mid	5	1.4	-	-	21.00	7	7	17.45	17.45
111	-04/11:1	1	1	1	1	1	i .				1



CAT- M1	eFDD 26 16QAM	high	1	1.4	-	-	22.07	7	7	16.38	16.38
CAT- M1	eFDD 26 16QAM	high	5	1.4	-	-	21.06	7	7	17.39	17.39
CAT-	eFDD 26	low	1	3	-	-	22.90	7	7	15.55	15.55
CAT-	QPSK eFDD 26	low	3	3	-	-	21.83	7	7	16.62	16.62
M1 CAT-	QPSK eFDD 26	low	6	3	-	-	20.98	7	7	17.47	17.47
M1 CAT-	QPSK eFDD 26	mid	1	3	-	-					
M1 CAT-	QPSK eFDD 26	mid	3	3	_	-	22.83	7	7	15.62	15.62
M1 CAT-	QPSK eFDD 26	mid	6	3	_	-	21.97	7	7	16.48	16.48
M1	QPSK				_		20.91	7	7	17.54	17.54
CAT- M1	eFDD 26 QPSK	high	1	3			22.86	7	7	15.59	15.59
CAT- M1	eFDD 26 QPSK	high	3	3	-	-	22.04	7	7	16.41	16.41
CAT- M1	eFDD 26 QPSK	high	6	3	-	-	20.96	7	7	17.49	17.49
CAT- M1	eFDD 26 16QAM	low	1	3	-	-	21.78	7	7	16.67	16.67
CAT- M1	eFDD 26 16QAM	low	5	3	-	-	21.02	7	7	17.43	17.43
CAT- M1	eFDD 26 16QAM	mid	1	3	-	-	21.91	7	7	16.54	16.54
CAT- M1	eFDD 26 16QAM	mid	5	3	-	-	21.05	7	7	17.40	17.40
CAT- M1	eFDD 26 16QAM	high	1	3	-	-	21.91	7	7	16.54	16.54
CAT-	eFDD 26	high	5	3	-	-	21.02	7	7	17.43	17.43
CAT-	16QAM eFDD 26	low	1	5	-	-	22.97	7	7	15.48	15.48
CAT-	QPSK eFDD 26	low	3	5	-	-	21.78	7	7	16.67	16.67
M1 CAT-	QPSK eFDD 26	low	6	5	-	-	21.96	7	7	16.49	16.49
M1 CAT-	QPSK eFDD 26	mid	1	5	-	-					
M1 CAT-	QPSK eFDD 26	mid	3	5	_	-	22.87	7	7	15.58	15.58
M1 CAT-	QPSK eFDD 26	mid	6	5	_	_	21.84	7	7	16.61	16.61
M1	QPSK			5	_	-	21.94	7	7	16.51	16.51
CAT- M1	eFDD 26 QPSK	high	1				22.84	7	7	15.61	15.61
CAT- M1	eFDD 26 QPSK	high	3	5	-	-	22.02	7	7	16.43	16.43
CAT- M1	eFDD 26 QPSK	high	6	5	-	-	21.97	7	7	16.48	16.48
CAT- M1	eFDD 26 16QAM	low	1	5	-	-	22.60	7	7	15.85	15.85
CAT- M1	eFDD 26 16QAM	low	5	5	-	-	20.94	7	7	17.51	17.51
CAT- M1	eFDD 26 16QAM	mid	1	5	-	-	22.80	7	7	15.65	15.65
CAT- M1	eFDD 26 16QAM	mid	5	5	-	-	21.04	7	7	17.41	17.41
CAT-	eFDD 26	high	1	5	-	-	22.81	7	7	15.64	15.64
CAT-	16QAM eFDD 26	high	5	5	-	-	21.04	7	7	17.41	17.41
CAT-	16QAM eFDD 26	low	1	10	-	-	23.01	7	7	15.44	15.44
M1 CAT-	QPSK eFDD 26	low	3	10	-	-	22.73	7	7	15.72	15.72
M1 CAT-	QPSK eFDD 26	low	6	10	-	-	21.88	7	7	16.57	16.57
M1 CAT-	QPSK eFDD 26	mid	1	10	-	-					
M1 CAT-	QPSK eFDD 26	mid	3	10	-	-	22.88	7	7	15.57	15.57
M1 CAT-	QPSK eFDD 26	mid	6	10	_	-	22.81	7	7	15.64	15.64
M1 CAT-	QPSK eFDD 26	high	1	10	-	-	21.86	7	7	16.59	16.59
M1	QPSK						22.58	7	7	15.87	15.87
CAT- M1	eFDD 26 QPSK	high	3	10	-	-	22.93	7	7	15.52	15.52
CAT- M1	eFDD 26 QPSK	high	6	10	-	-	21.86	7	7	16.59	16.59
CAT- M1	eFDD 26 16QAM	low	1	10	-	-	22.79	7	7	15.66	15.66
CAT- M1	eFDD 26 16QAM	low	5	10	-	-	21.91	7	7	16.54	16.54
CAT- M1	eFDD 26 16QAM	mid	1	10	-	-	22.91	7	7	15.54	15.54



CAT- M1	eFDD 26 16QAM	mid	5	10	-	-	21.85	7	7	16.60	16.60
CAT- M1	eFDD 26 16QAM	high	1	10	-	ı	22.44	7	7	16.01	16.01
CAT- M1	eFDD 26 16QAM	high	5	10	-	1	21.82	7	7	16.63	16.63

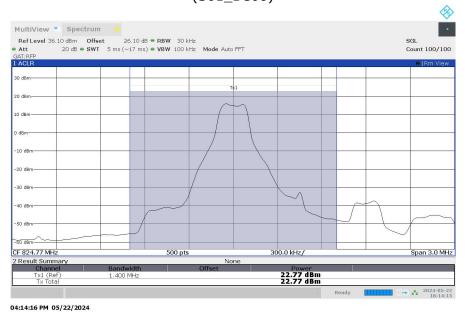
Remark:

Please see next sub-clause for the measurement plot.
The max. antenna gain is regarding the output power not SAR / MPE.

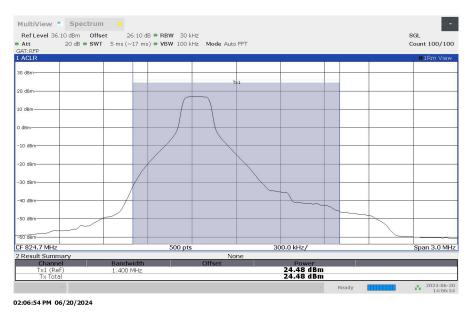


5.2.4 MEASUREMENT PLOT (EXAMPLE PLOT, SHOWING WORST CASE, IF APPLICABLE)

Technology = CAT-M1, Radio Technology = eFDD 5 QPSK, Operating Frequency = low channel, ChBW = 10 MHz, Ressource Blocks = 1 (S01_BC08)



Technology = CAT-M1, Radio Technology = eFDD 26 QPSK, Operating Frequency = low channel, ChBW = 1.4 MHz, Ressource Blocks = 1 (S01_BC08)



5.2.5 TEST EQUIPMENT USED



5.3 RF OUTPUT POWER

Standard FCC PART 22 Subpart H

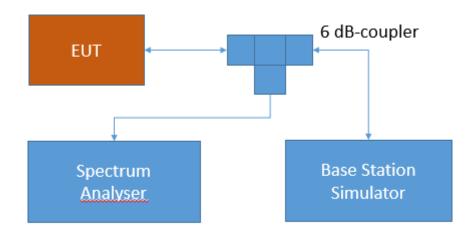
The test was performed according to:

ANSI C63.26: 2015; 5.2.4.1, Wideband Signal: 5.2.4.4

5.3.1 TEST DESCRIPTION

This test case is intended to demonstrate compliance to the applicable RF Output power test case per § 2.1046 and RSS-GEN 6.12. The limit and the requirements come from the applicable rule part and ISED RSS-Standard for the operating band of the cellular device.

The EUT was connected to the test setup according to the following diagram:



Test Setup FCC Part 22/24/27/90 Cellular; RF Output power

The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.

5.3.2 TEST REQUIREMENTS / LIMITS

FCC Part 22, § 22.913

- (a) Maximum ERP. The ERP of transmitters in the Cellular Radiotelephone Service must not exceed the limits in this section.
- (5) The ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.

TEST REPORT REFERENCE: MDE_UBLOX_2401_FCC_01 Page 47 of 137



RSS-132; 5.4 Transmitter Output Power and Equivalent Isotropically Radiated Power

The transmitter output power shall be measured in terms of average power. The equivalent radiated power (e.r.p.) shall not exceed 7 watts for mobile equipment and 3 watts for portable equipment.

5.3.3 TEST PROTOCOL

Ambient temperature: 20 - 28 °C Relative humidity: 30 - 40 %

	adio inology	Channel	Ressource Blocks / Subcarrier	Bandwidth [MHz]	Peak Cond. Power [dBm]	Average Cond. Power [dBm]	RMS Cond. Power [dBm]	FCC ERP Limit [W]	IC ERP Limit [W]	Max. Antenna Gain FCC [dBd]	Max. Antenna Gain IC [dBd]
NB- IoT	eFDD 5 QPSK	low	1	0.2	-	-	21.82	7	7	16.63	16.63
NB- IoT	eFDD 5 QPSK	low	3	0.2	-	-	21.97	7	7	16.48	16.48
NB- IoT	eFDD 5 QPSK	low	6	0.2	-	-	21.91	7	7	16.54	16.54
NB- IoT	eFDD 5 QPSK	low	12	0.2	-	-	22.02	7	7	16.43	16.43
NB- IoT	eFDD 5 QPSK	mid	1	0.2	-	-	21.81	7	7	16.64	16.64
NB- IoT	eFDD 5 QPSK	mid	3	0.2	-	-	21.96	7	7	16.49	16.49
NB- IoT	eFDD 5 QPSK	mid	6	0.2	-	-	21.98	7	7	16.47	16.47
NB- IoT	eFDD 5 QPSK	mid	12	0.2	-	-	21.94	7	7	16.51	16.51
NB- IoT	eFDD 5 QPSK	high	1	0.2	-	-	21.70	7	7	16.75	16.75
NB- IoT	eFDD 5 QPSK	high	3	0.2	-	-	21.81	7	7	16.64	16.64
NB- IoT	eFDD 5 QPSK	high	6	0.2	-	-	21.87	7	7	16.58	16.58
NB- IoT	eFDD 5 QPSK	high	12	0.2	-	-	21.80	7	7	16.65	16.65
NB- IoT	eFDD 5 BPSK	low	1	0.2	-	-	21.84	7	7	16.61	16.61
NB- IoT	eFDD 5 BPSK	mid	1	0.2	-	-	21.73	7	7	16.72	16.72
NB- IoT	eFDD 5 BPSK	high	1	0.2	-	-	21.61	7	7	16.84	16.84

Remarks:

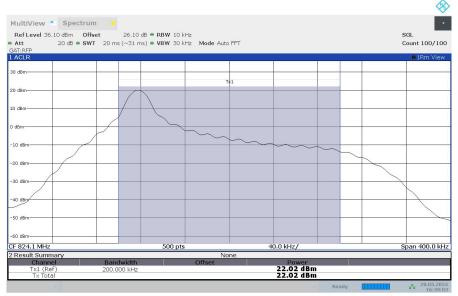
Please see next sub-clause for the measurement plot.

The max. antenna gain is regarding the output power not SAR / $\ensuremath{\mathsf{MPE}}.$



5.3.4 MEASUREMENT PLOT (EXAMPLE PLOT, SHOWING WORST CASE, IF APPLICABLE)

Technology = NB-IoT, Radio Technology = eFDD 5 QPSK, Operating Frequency = low channel, ChBW = 0.2 MHz, Ressource Blocks = 12 (S01_BC08)



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5.3.5 TEST EQUIPMENT USED



5.4 EMISSION AND OCCUPIED BANDWIDTH

Standard FCC PART 22 Subpart H

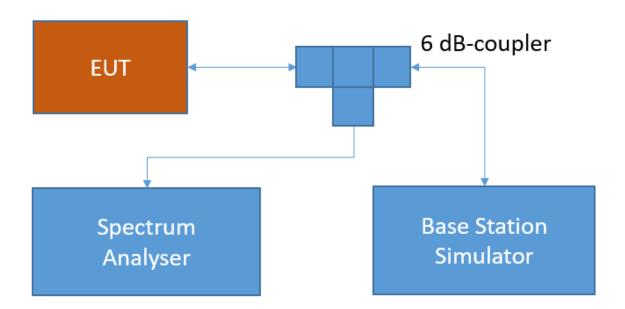
The test was performed according to:

ANSI C63.26: 2015; 5.4.3 (relative meas. Procedure [26dB for GSM, EGDE, WCDMA, HSDPA, HSUPA]) 5.4.4 (Power bandwidth (99%))

5.4.1 TEST DESCRIPTION

This test case is intended to demonstrate compliance to the applicable conducted spurious emission test case per FCC §2.1049 and RSS-GEN 6.7. The limit and the requirements come from the applicable rule part and ISED RSS-Standard for the operating band of the cellular device.

The EUT was connected to the test setups according to the following diagram:



Test Setup FCC / ISED Cellular; Emission and occupied bandwidth

The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.



5.4.2 TEST REQUIREMENTS / LIMITS

FCC Part 2.1049; Occupied Bandwidth:

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the following conditions as applicable:

- (h) Transmitters employing digital modulation techniques—when modulated by an input signal such that its amplitude and symbol rate represent the maximum rated conditions under which the equipment will be operated. The signal shall be applied through any filter networks, pseudo-random generators or other devices required in normal service. Additionally, the occupied bandwidth shall be shown for operation with any devices used for modifying the spectrum when such devices are optional at the discretion of the user.
- (i) Transmitters designed for other types of modulation—when modulated by an appropriate signal of sufficient amplitude to be representative of the type of service in which used. A description of the input signal should be supplied.

RSS-GEN; 6.6 Occupied Bandwidth

The emission bandwidth (\times dB) is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated \times dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3 \times the resolution bandwidth.

When the occupied bandwidth limit is not stated in the applicable RSS or reference measurement method, the transmitted signal bandwidth shall be reported as the 99% emission bandwidth, as calculated or measured.

5.4.3 TEST PROTOCOL

Ambient temperature: 20 - 28 °C Relative humidity: 30 - 40 %

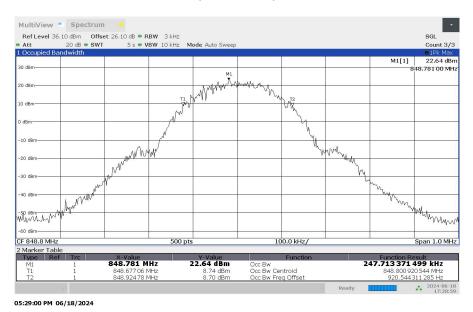
Radio Tec	hnology	Channel	Ressource Blocks / Subcarrier	Bandwidth [MHz]	26 dB BW [kHz]	99 % BW [kHz]
GSM	GSM 850 GPRS	low	-	0.2	316	244
GSM	GSM 850 GPRS	mid	ı	0.2	318	243
GSM	GSM 850 GPRS	high	ı	0.2	324	248
GSM	GSM 850 EDGE	low	ı	0.2	294	232
GSM	GSM 850 EDGE	mid	-	0.2	304	239
GSM	GSM 850 EDGE	high	-	0.2	290	235

Remark: Please see next sub-clause for the measurement plot.



5.4.4 MEASUREMENT PLOT (EXAMPLE PLOT, SHOWING WORST CASE, IF APPLICABLE)

Technology = GSM, Radio Technology = GPRS 850, Operating Frequency = high channel (S01_BC08)



Technology = GSM, Radio Technology = EDGE 850, Operating Frequency = mid channel (S01_BC08)



5.4.5 TEST EQUIPMENT USED



5.5 EMISSION AND OCCUPIED BANDWIDTH

Standard FCC PART 22 Subpart H

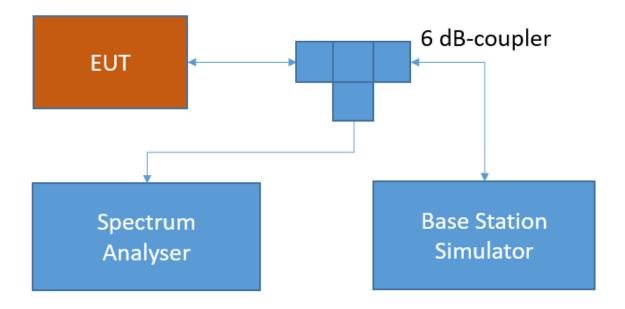
The test was performed according to:

ANSI C63.26: 2015; 5.4.3 (relative meas. Procedure [26dB for GSM, EGDE, WCDMA, HSDPA, HSUPA]) 5.4.4 (Power bandwidth (99%))

5.5.1 TEST DESCRIPTION

This test case is intended to demonstrate compliance to the applicable conducted spurious emission test case per FCC §2.1049 and RSS-GEN 6.7. The limit and the requirements come from the applicable rule part and ISED RSS-Standard for the operating band of the cellular device.

The EUT was connected to the test setups according to the following diagram:



Test Setup FCC / ISED Cellular; Emission and occupied bandwidth

The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.



5.5.2 TEST REQUIREMENTS / LIMITS

FCC Part 2.1049; Occupied Bandwidth:

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the following conditions as applicable:

- (h) Transmitters employing digital modulation techniques—when modulated by an input signal such that its amplitude and symbol rate represent the maximum rated conditions under which the equipment will be operated. The signal shall be applied through any filter networks, pseudo-random generators or other devices required in normal service. Additionally, the occupied bandwidth shall be shown for operation with any devices used for modifying the spectrum when such devices are optional at the discretion of the user.
- (i) Transmitters designed for other types of modulation—when modulated by an appropriate signal of sufficient amplitude to be representative of the type of service in which used. A description of the input signal should be supplied.

RSS-GEN; 6.6 Occupied Bandwidth

The emission bandwidth (\times dB) is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated \times dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3 \times the resolution bandwidth.

When the occupied bandwidth limit is not stated in the applicable RSS or reference measurement method, the transmitted signal bandwidth shall be reported as the 99% emission bandwidth, as calculated or measured.

5.5.3 TEST PROTOCOL

Ambient temperature: 20 - 28 °C Relative humidity: 30 - 40 %

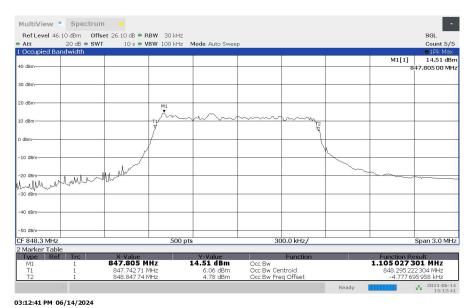
Radio	Technology	Channel	Ressource Blocks / Subcarrier	Bandwidth [MHz]	26 dB BW [kHz]	99 % BW [kHz]
CAT-M1	eFDD 5 QPSK	low	6	1.4	-	1101
CAT-M1	eFDD 5 QPSK	mid	6	1.4	=	1100
CAT-M1	eFDD 5 QPSK	high	6	1.4	-	1105
CAT-M1	eFDD 5 16QAM	low	5	1.4	-	937
CAT-M1	eFDD 5 16QAM	mid	5	1.4	-	935
CAT-M1	eFDD 5 16QAM	high	5	1.4	-	929
CAT-M1	eFDD 26 QPSK	low	6	1.4	-	1098
CAT-M1	eFDD 26 QPSK	mid	6	1.4	-	1099
CAT-M1	eFDD 26 QPSK	high	6	1.4	-	1100
CAT-M1	eFDD 26 16QAM	low	5	1.4	-	925
CAT-M1	eFDD 26 16QAM	mid	5	1.4	-	932
CAT-M1	eFDD 26 16QAM	high	5	1.4	-	937

Remark: Please see next sub-clause for the measurement plot.

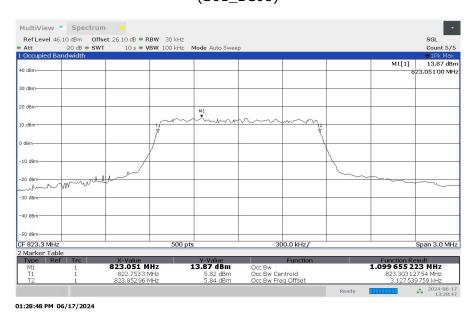


5.5.4 MEASUREMENT PLOT (EXAMPLE PLOT, SHOWING WORST CASE, IF APPLICABLE)

Technology = CAT-M1, Radio Technology = eFDD 5 QPSK, Operating Frequency = high channel, ChBW = 1.4 MHz, Ressource Blocks = 6 (S01_BC08)



Technology = CAT-M1, Radio Technology = eFDD 26 QPSK, Operating Frequency = high channel, ChBW = 1.4 MHz, Ressource Blocks = 6 (S01 BC08)



5.5.5 TEST EQUIPMENT USED



5.6 EMISSION AND OCCUPIED BANDWIDTH

Standard FCC PART 22 Subpart H

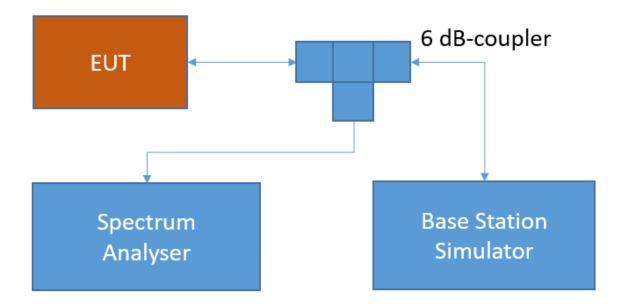
The test was performed according to:

ANSI C63.26: 2015; 5.4.3 (relative meas. Procedure [26dB for GSM, EGDE, WCDMA, HSDPA, HSUPA]) 5.4.4 (Power bandwidth (99%))

5.6.1 TEST DESCRIPTION

This test case is intended to demonstrate compliance to the applicable conducted spurious emission test case per FCC §2.1049 and RSS-GEN 6.7. The limit and the requirements come from the applicable rule part and ISED RSS-Standard for the operating band of the cellular device.

The EUT was connected to the test setups according to the following diagram:



Test Setup FCC / ISED Cellular; Emission and occupied bandwidth

The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.



5.6.2 TEST REQUIREMENTS / LIMITS

FCC Part 2.1049; Occupied Bandwidth:

The occupied bandwidth, that is the frequency bandwidth such that, below its lower and above its upper frequency limits, the mean powers radiated are each equal to 0.5 percent of the total mean power radiated by a given emission shall be measured under the following conditions as applicable:

- (h) Transmitters employing digital modulation techniques—when modulated by an input signal such that its amplitude and symbol rate represent the maximum rated conditions under which the equipment will be operated. The signal shall be applied through any filter networks, pseudo-random generators or other devices required in normal service. Additionally, the occupied bandwidth shall be shown for operation with any devices used for modifying the spectrum when such devices are optional at the discretion of the user.
- (i) Transmitters designed for other types of modulation—when modulated by an appropriate signal of sufficient amplitude to be representative of the type of service in which used. A description of the input signal should be supplied.

RSS-GEN; 6.6 Occupied Bandwidth

The emission bandwidth (\times dB) is defined as the frequency range between two points, one above and one below the carrier frequency, at which the spectral density of the emission is attenuated \times dB below the maximum in-band spectral density of the modulated signal. Spectral density (power per unit bandwidth) is to be measured with a detector of resolution bandwidth in the range of 1% to 5% of the anticipated emission bandwidth, and a video bandwidth at least 3 \times the resolution bandwidth.

When the occupied bandwidth limit is not stated in the applicable RSS or reference measurement method, the transmitted signal bandwidth shall be reported as the 99% emission bandwidth, as calculated or measured.

5.6.3 TEST PROTOCOL

Ambient temperature: $20 - 28 \, ^{\circ}\text{C}$ Relative humidity: $30 - 40 \, ^{\circ}$

Radio Technology		Channel	Ressource Blocks / Subcarrier	Bandwidth [MHz]	26 dB BW [kHz]	99 % BW [kHz]
NB-IoT	eFDD 5 QPSK	low	12	0.2	-	124
NB-IoT	eFDD 5 QPSK	mid	12	0.2	1	128
NB-IoT	eFDD 5 QPSK	high	12	0.2	-	123
NB-IoT	eFDD 5 BPSK	low	1	0.2	-	126
NB-IoT	eFDD 5 BPSK	mid	1	0.2	-	123
NB-IoT	eFDD 5 BPSK	high	1	0.2	-	125

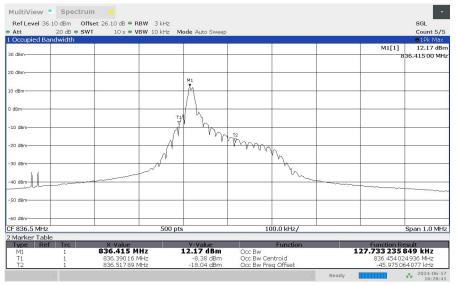
Remark: Please see next sub-clause for the measurement plot.

TEST REPORT REFERENCE: MDE_UBLOX_2401_FCC_01 Page 57 of 137



5.6.4 MEASUREMENT PLOT (EXAMPLE PLOT, SHOWING WORST CASE, IF APPLICABLE)

Technology = NB-IoT, Radio Technology = eFDD 5 QPSK, Operating Frequency = mid channel, ChBW = 0.2 MHz, Ressource Blocks = 12 (S01_BC08)



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5.6.5 TEST EQUIPMENT USED



5.7 RF OUTPUT POWER

Standard FCC PART 24 Subpart E

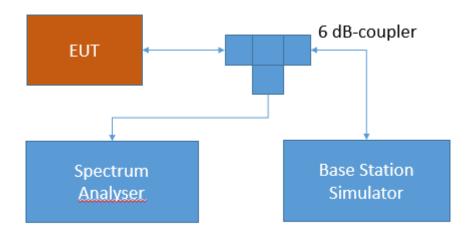
The test was performed according to:

ANSI C63.26: 2015; 5.2.4.1 Narrowband Signal: 5.2.4.3.3

5.7.1 TEST DESCRIPTION

This test case is intended to demonstrate compliance to the applicable RF Output power test case per § 2.1046 and RSS-GEN 6.12. The limit and the requirements come from the applicable rule part and ISED RSS-Standard for the operating band of the cellular device.

The EUT was connected to the test setup according to the following diagram:



Test Setup FCC Part 22/24/27/90 Cellular; RF Output power

The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.

5.7.2 TEST REQUIREMENTS / LIMITS

FCC Part 24, § 24.232

(c) Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

RSS-133; 6.4 Transmitter Output Power and Equivalent Isotropically Radiated Power

The equivalent isotropically radiated power (e.i.r.p.) for transmitters shall not exceed the limits given in SRSP-510.

TEST REPORT REFERENCE: MDE_UBLOX_2401_FCC_01 Page 59 of 137



SRSP-510; 5.1.2 Radiated Power and Antenna Height Limits – Mobile Stations

Mobile stations and hand-held portables are limited to 2 watts maximum e.i.r.p. The equipment shall employ means to limit the power to the minimum necessary for successful communication.

5.7.3 TEST PROTOCOL

Ambient temperature: 20 - 28 °C Relative humidity: 30 - 40 %

Radio 1	Technology (Channel	Ressource Blocks / Subcarrier	Band- width [MHz]	Peak Cond. Power [dBm]	Average Cond. Power [dBm]	RMS Cond. Power [dBm]	FCC EIRP Limit [W]	IC EIRP Limit [W]	Maximum Antenna Gain FCC [dBi]	Maximum Antenna Gain IC [dBi]
GSM	GSM 1900 GPRS	low	-	0.2	29.2	27.73	28.12	2	2	4.88	4.88
GSM	GSM 1900 GPRS	mid	-	0.2	29.11	27.70	28.12	2	2	4.88	4.88
GSM	GSM 1900 GPRS	high	-	0.2	29.2	27.73	28.15	2	2	4.85	4.85
GSM	GSM 1900 EDGE	low	-	0.2	28.52	25.12	25.73	2	2	7.27	7.27
GSM	GSM 1900 EDGE	mid	-	0.2	28.3	25.13	25.69	2	2	7.31	7.31
GSM	GSM 1900 EDGE	high	-	0.2	28.17	25.00	25.35	2	2	7.65	7.65

Remarks:

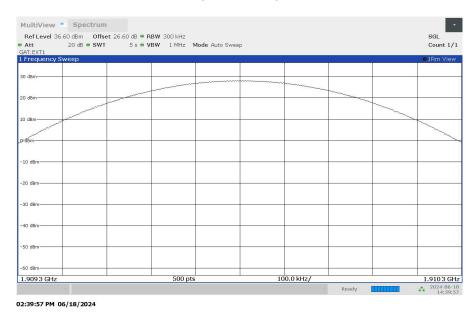
Please see next sub-clause for the measurement plot.

The max. antenna gain is regarding the output power not SAR / MPE.



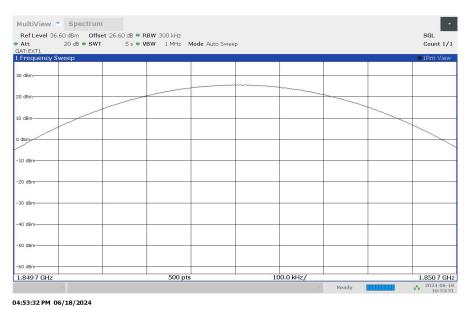
5.7.4 MEASUREMENT PLOT (EXAMPLE PLOT, SHOWING WORST CASE, IF APPLICABLE)

Technology = GPRS, Radio Technology = GPRS 1900, Operating Frequency = high channel (S01_BC08)



maximum value 28.15dBm measured at 1909.8MHz

Technology = EDGE, Radio Technology = EDGE 1900, Operating Frequency = low channel (S01_BC08)



maximum value 25.73dBm measured at 1850.2MHz

5.7.5 TEST EQUIPMENT USED



5.8 RF OUTPUT POWER

Standard FCC PART 24 Subpart E

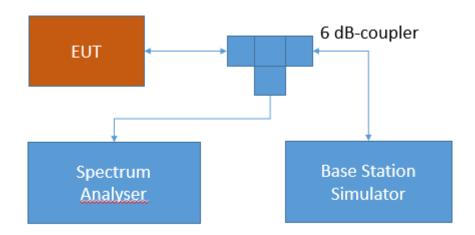
The test was performed according to:

ANSI C63.26: 2015; 5.2.4.1, Wideband Signal: 5.2.4.4

5.8.1 TEST DESCRIPTION

This test case is intended to demonstrate compliance to the applicable RF Output power test case per § 2.1046 and RSS-GEN 6.12. The limit and the requirements come from the applicable rule part and ISED RSS-Standard for the operating band of the cellular device.

The EUT was connected to the test setup according to the following diagram:



Test Setup FCC Part 22/24/27/90 Cellular; RF Output power

The attenuation of the measuring and stimulus path are known for each measured frequency and are considered.

The Spectrum Analyzer settings can be directly found in the measurement diagrams.

5.8.2 TEST REQUIREMENTS / LIMITS

FCC Part 24, § 24.232

(c) Mobile and portable stations are limited to 2 watts EIRP and the equipment must employ a means for limiting power to the minimum necessary for successful communications.

RSS-133; 6.4 Transmitter Output Power and Equivalent Isotropically Radiated Power

The equivalent isotropically radiated power (e.i.r.p.) for transmitters shall not exceed the limits given in SRSP-510.

TEST REPORT REFERENCE: MDE_UBLOX_2401_FCC_01 Page 62 of 137



SRSP-510; 5.1.2 Radiated Power and Antenna Height Limits - Mobile Stations

Mobile stations and hand-held portables are limited to 2 watts maximum e.i.r.p. The equipment shall employ means to limit the power to the minimum necessary for successful communication.

5.8.3 TEST PROTOCOL

Ambient temperature: 20 - 28 °C Relative humidity: 30 - 40 %

Radio	Radio Technology		Resource Blocks / Subcarrier	Band- width [MHz]	Peak Cond. Power [dBm]	Average Cond. Power [dBm]	RMS Cond. Power [dBm]	FCC EIRP Limit [W]	IC EIRP Limit [W]	Maximum Antenna Gain FCC [dBi]	Maximum Antenna Gain IC [dBi]
CAT-M1	eFDD 2 QPSK	low	1	1.4	-	-	22.33	2	2	10.67	10.67
CAT-M1	eFDD 2 QPSK	low	3	1.4	-	-	21.23	2	2	11.77	11.77
CAT-M1	eFDD 2 QPSK	low	6	1.4	-	-	20.12	2	2	12.88	12.88
CAT-M1	eFDD 2 QPSK	mid	1	1.4	-	-	22.37	2	2	10.63	10.63
CAT-M1	eFDD 2 QPSK	mid	3	1.4	-	-	21.29	2	2	11.71	11.71
CAT-M1	eFDD 2 QPSK	mid	6	1.4	-	-	20.24	2	2	12.76	12.76
CAT-M1	eFDD 2 QPSK	high	1	1.4	-	-	22.28	2	2	10.72	10.72
CAT-M1	eFDD 2 QPSK	high	3	1.4	-	-	21.18	2	2	11.82	11.82
CAT-M1	eFDD 2 QPSK	high	6	1.4	-	-	20.10	2	2	12.9	12.9
CAT-M1	eFDD 2 16QAM	low	11	1.4	-	-	21.12	2	2	11.88	11.88
CAT-M1	eFDD 2 16QAM	low	5	1.4	-	-	20.23	2	2	12.77	12.77
CAT-M1	eFDD 2 16QAM	mid	1	1.4	-	-	21.19	2	2	11.81	11.81
CAT-M1	eFDD 2 16QAM	mid	5	1.4	-	-	20.47	2	2	12.53	12.53
CAT-M1	eFDD 2 16QAM	high	1	1.4	-	-	21.21	2	2	11.79	11.79
CAT-M1	eFDD 2 16QAM	high	5	1.4	-	-	20.19	2	2	12.81	12.81
CAT-M1	eFDD 2 QPSK	low	1	3	-	-	23.06	2	2	9.94	9.94
CAT-M1	eFDD 2 QPSK	low	3	3	-	-	21.90	2	2	11.1	11.1
CAT-M1	eFDD 2 QPSK	low	6	3			20.83	2	2	12.17	12.17
CAT-M1	eFDD 2 QPSK	mid	1	3	-	-	22.76	2	2	10.24	10.24
CAT-M1	eFDD 2 QPSK	mid	3	3	-	-	21.86	2	2	11.14	11.14
CAT-M1	eFDD 2 QPSK eFDD 2 QPSK	mid	6	3	-	-	20.78	2	2	12.22	12.22
CAT-M1	eFDD 2 QPSK eFDD 2 OPSK	high	1		-	-	22.64			10.36	10.36
CAT-M1		high	3	3	-	-	21.76	2	2	11.24	11.24
CAT-M1	eFDD 2 QPSK	high	6	3	-	-	20.56	2	2	12.44	12.44
CAT-M1 CAT-M1	eFDD 2 16QAM	low	<u>1</u> 5	3	-	-	21.89	2	2	11.11	11.11
CAT-M1	eFDD 2 16QAM eFDD 2 16QAM	low mid	1	3	-	-	20.82 21.67	2	2	12.18 11.33	12.18 11.33
CAT-M1		mid	5	3	-	-	20.84	2	2	12.16	12.16
CAT-M1	eFDD 2 16QAM eFDD 2 16QAM	high	1	3	-	-	21.71	2	2	11.29	11.29
CAT-M1	eFDD 2 16QAM	high	5	3	-	-	20.60	2	2	12.4	12.4
CAT-M1	eFDD 2 QPSK	low	1	5	_	-	22.86	2	2	10.14	10.14
CAT-M1	eFDD 2 QPSK	low	3	5	_	-	21.87	2	2	11.13	11.13
CAT-M1	eFDD 2 QPSK	low	6	5	_	_	21.91	2	2	11.09	11.09
CAT-M1	eFDD 2 QPSK	mid	1	5	_	_	22.82	2	2	10.18	10.18
CAT-M1	eFDD 2 QPSK	mid	3	5	-	-	21.97	2	2	11.03	11.03
CAT-M1	eFDD 2 QPSK	mid	6	5	-	-	21.86	2	2	11.14	11.14
CAT-M1	eFDD 2 QPSK	high	1	5	-	-	22.61	2	2	10.39	10.39
CAT-M1	eFDD 2 QPSK	high	3	5	-	-	21.90	2	2	11.1	11.1
CAT-M1	eFDD 2 QPSK	high	6	5	_	-	21.75	2	2	11.25	11.25
CAT-M1	eFDD 2 16QAM	low	1	5	-	-	22.97	2	2	10.03	10.03
CAT-M1	eFDD 2 16QAM	low	5	5	-	-	20.57	2	2	12.43	12.43
CAT-M1	eFDD 2 16QAM	mid	1	5	-	-	22.75	2	2	10.25	10.25
CAT-M1	eFDD 2 16QAM	mid	5	5	-	-	20.56	2	2	12.44	12.44
CAT-M1	eFDD 2 16QAM	high	1	5	-	-	21.90	2	2	11.1	11.1
CAT-M1	eFDD 2 16QAM	high	5	5	-	-	20.47	2	2	12.53	12.53
CAT-M1	eFDD 2 QPSK	low	1	10	-	-	22.94	2	2	10.06	10.06
CAT-M1	eFDD 2 QPSK	low	3	10	-	-	17.96	2	2	15.04	15.04
CAT-M1	eFDD 2 QPSK	low	6	10	-	-	21.91	2	2	11.09	11.09
CAT-M1	eFDD 2 QPSK	mid	1	10	-	-	22.93	2	2	10.07	10.07
CAT-M1	eFDD 2 QPSK	mid	3	10	-	-	22.72	2	2	10.28	10.28
CAT-M1	eFDD 2 QPSK	mid	6	10	-	-	21.93	2	2	11.07	11.07
CAT-M1	eFDD 2 QPSK	high	1	10	-	-	22.38	2	2	10.62	10.62
CAT-M1	eFDD 2 QPSK	high	3	10	-	-	22.73	2	2	10.27	10.27
CAT-M1	eFDD 2 QPSK	high	6	10	-	-	21.77	2	2	11.23	11.23
CAT-M1	eFDD 2 16QAM	low	1	10	-	-	22.72	2	2	10.28	10.28
CAT-M1	eFDD 2 16QAM	low	5	10	-	-	21.94	2	2	11.06	11.06
CAT-M1	eFDD 2 16QAM	mid	1	10	-	-	22.78	2	2	10.22	10.22
CAT-M1	eFDD 2 16QAM	mid	5	10	-	-	21.84	2	2	11.16	11.16
CAT-M1	eFDD 2 16QAM	high	1	10	-	-	22.19	2	2	10.81	10.81
CAT-M1	eFDD 2 16QAM	high	5	10	-	-	21.71	2	2	11.29	11.29
CAT-M1	eFDD 25 QPSK	low	1	1.4	-	-	23.34	2	2	9.66	9.66
CAT-M1	eFDD 25 QPSK	low	3	1.4	-	-	22.28	2	2	10.72	10.72
CAT-M1	eFDD 25 QPSK	low	6	1.4	-	-	21.16	2	2	11.84	11.84



CAT-M1	eFDD 25 QPSK	mid	1	1.4	-	-	23.20	2	2	9.8	9.8
CAT-M1	eFDD 25 QPSK	mid	3	1.4	_	-	22.22	2	2	10.78	10.78
				_	_						
CAT-M1	eFDD 25 QPSK	mid	6	1.4		-	21.11	2	2	11.89	11.89
CAT-M1	eFDD 25 QPSK	high	1	1.4	-	-	23.03	2	2	9.97	9.97
CAT-M1	eFDD 25 QPSK	high	3	1.4	-	-	21.91	2	2	11.09	11.09
CAT-M1	eFDD 25 QPSK	high	6	1.4	-	-	20.96	2	2	12.04	12.04
CAT-M1	eFDD 25	low	1	1.4	-	-	22.03	2	2	10.07	10.07
	16QAM									10.97	10.97
CAT-M1	eFDD 25	low	5	1.4	-	-	19.98	2	2		
C/(1 111	16QAM	1011	3	1			15.50	-	_	13.02	13.02
CAT-M1	eFDD 25	mid	1	1.4	-	-	22.23	2	2		
CAT-MI		IIIIu	1	1.4	-	-	22.23	2		10.77	10.77
	16QAM						40.55		_		
CAT-M1	eFDD 25	mid	5	1.4	-	-	19.55	2	2	13.45	13.45
	16QAM										
CAT-M1	eFDD 25	high	1	1.4	-	-	21.85	2	2	11.15	11.15
	16QAM									11.13	11.13
CAT-M1	eFDD 25	high	5	1.4	-	-	19.56	2	2	42.44	42.44
	16QAM	_								13.44	13.44
CAT-M1	eFDD 25 QPSK	low	1	3	_	-	23.10	2	2	9.9	9.9
CAT-M1	eFDD 25 QPSK	low	3	3	_	_	22.06	2	2	10.94	10.94
CAT-M1	eFDD 25 QPSK	low	6	3	-	-	21.12	2	2	11.88	11.88
CAT-M1	eFDD 25 QPSK	mid	1	3	-	-	22.98	2	2	10.02	10.02
CAT-M1	eFDD 25 QPSK	mid	3	3	-	-	21.99	2	2	11.01	11.01
CAT-M1	eFDD 25 QPSK	mid	6	3	-	-	21.00	2	2	12	12
CAT-M1	eFDD 25 QPSK	high	1	3	-	-	22.79	2	2	10.21	10.21
CAT-M1	eFDD 25 QPSK	high	3	3	_	-	21.97	2	2	11.03	11.03
CAT-M1	eFDD 25 QPSK	high	6	3	-	-	20.75	2	2	12.25	12.25
		,			-	-				14.43	14.43
CAT-M1	eFDD 25	low	1	3	-	-	22.08	2	2	10.92	10.92
	16QAM										
CAT-M1	eFDD 25	low	5	3	-	-	19.80	2	2	13.2	13.2
	16QAM										
CAT-M1	eFDD 25	mid	1	3	-	-	21.87	2	2	11.13	11.13
	16QAM									11.13	11.13
CAT-M1	eFDD 25	mid	5	3	-	-	19.51	2	2	12.40	12.40
	16QAM									13.49	13.49
CAT-M1	eFDD 25	high	1	3	-	-	21.85	2	2		
	16QAM									11.15	11.15
CAT-M1	eFDD 25	high	5	3	_	_	19.45	2	2		
CAI III	16QAM	iligii	3				15.45	2	_	13.55	13.55
CAT-M1	eFDD 25 QPSK	low	1	5	-	-	23.13	2	2	9.87	9.87
			3		-	_					
CAT-M1	eFDD 25 QPSK	low		5			22.16	2	2	10.84	10.84
CAT-M1	eFDD 25 QPSK	low	6	5	-	-	22.07	2	2	10.93	10.93
CAT-M1	eFDD 25 QPSK	mid	1	5	-	-	22.95	2	2	10.05	10.05
CAT-M1	eFDD 25 QPSK	mid	3	5	-	-	22.13	2	2	10.87	10.87
CAT-M1	eFDD 25 QPSK	mid	6	5	-	-	22.04	2	2	10.96	10.96
CAT-M1	eFDD 25 QPSK	high	1	5	_	-	22.85	2	2	10.15	10.15
CAT-M1	eFDD 25 QPSK	high	3	5	_	_	22.00	2	2	11	11
CAT-M1				5							
	eFDD 25 QPSK	high	6		-	-	21.86	2	2	11.14	11.14
CAT-M1	eFDD 25	low	1	5	-	-	23.16	2	2	9.84	9.84
	16QAM										
CAT-M1	eFDD 25	low	5	5	-	-	19.86	2	2	13.14	13.14
	16QAM									15.17	13.17
CAT-M1	eFDD 25	mid	1	5	-	-	22.86	2	2	10.14	10.14
	16QAM									10.14	10.14
CAT-M1	eFDD 25	mid	5	5	_	_	19.49	2	2		
0,11	16QAM		J				251.15	_	_	13.51	13.51
CAT-M1	eFDD 25	high	1	5	_	_	22.95	2	2		1
C/ (1 1/11	16QAM	9.1	_	1	l]	22.55	-	-	10.05	10.05
CAT-M1	eFDD 25	high	5	5	-	-	19.43	2	2		
CA1-MI	16QAM	iligii	3		I -	1 -	17.43	4		13.57	13.57
CAT MA				10	1	-	22.22				
CAT-M1	eFDD 25 QPSK	low	1	10	-	-	23.32	2	2	9.68	9.68
CAT-M1	eFDD 25 QPSK	low	3	10	-	-	23.21	2	2	9.79	9.79
CAT-M1	eFDD 25 QPSK	low	6	10	-	-	22.13	2	2	10.87	10.87
CAT-M1	eFDD 25 QPSK	mid	1	10	-	-	23.05	2	2	9.95	9.95
CAT-M1	eFDD 25 QPSK	mid	3	10	-	-	23.18	2	2	9.82	9.82
CAT-M1	eFDD 25 QPSK	mid	6	10	-	-	22.05	2	2	10.95	10.95
CAT-M1	eFDD 25 QPSK	high	1	10	_	_	22.69	2	2	10.31	10.31
CAT-M1	eFDD 25 QPSK	high	3	10	-	-	22.97	2	2	10.03	10.03
CAT-M1	eFDD 25 QPSK	high	6	10	-		21.81	2	2	11.19	11.19
	eFDD 25 QPSK eFDD 25				-	-				11.19	11.19
CAT-M1		low	1	10	I -	_	23.15	2	2	9.85	9.85
CAT 111	16QAM	 		1.0	-	-	20.05	_			
CAT-M1	eFDD 25	low	5	10	-	-	20.85	2	2	12.15	12.15
	16QAM	ļ		1	ļ	ļ	1				12.13
CAT-M1	eFDD 25	mid	1	10	-	-	22.80	2	2	10.2	10.2
	16QAM	<u> </u>		1						10.2	10.2
	eFDD 25	mid	5	10	-	-	20.38	2	2	12.62	12.62
CAT-M1	EFDD 25			1	Ī	Ī	1		I	12.62	12.62
CAT-M1	16QAM										
CAT-M1		high	1	10	-	-	22.63	2	2	10.27	10.27
	16QAM	high		10	-	-	22.63	2	2	10.37	10.37
	16QAM eFDD 25	high high	1 5	10	-	-	22.63	2	2		
CAT-M1	16QAM eFDD 25 16QAM	_								10.37 12.62	10.37 12.62

Remarks:

Please see next sub-clause for the measurement plot.
The max. antenna gain is regarding the output power not SAR / MPE.