

TEST REPORT

of

FCC Part 2 Subpart J, Part 22 Subpart C/H,
Part 24 Subpart E, Part 27 Subpart C and Part 90 Subpart S/R
IC RSS-130 Issue 2, RSS-132 Issue 3, RSS-133 Issue 6,
RSS-139 Issue 4, RSS-140 Issue 1,
RSS-199 Issue 3 and RSS-Gen Issue 5

FCC ID: TQ8LI99700200
IC Certification: 5074A-LI99700200

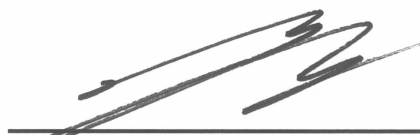
Equipment Under Test : Mission Service Platform
Model Name : LI99700200
Variant Model Name(s) : -
Applicant : FCC: HYUNDAI MOBIS CO., LTD.
IC: Hyundai MOBIS Co., Ltd
Manufacturer : Hyundai Mobis Co., Ltd.
Date of Receipt : 2022.07.11
Date of Test(s) : 2022.07.11 ~ 2023.02.24
Date of Issue : 2023.02.28

In the configuration tested, the EUT complied with the standards specified above. This test report does not assure KOLAS accreditation.

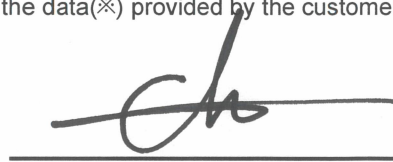
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- 2) The SGS Korea is not responsible for the sampling, the results of this test report apply to the sample as received.
- 3) This test report cannot be reproduced, except in full, without prior written permission of the Company.
- 4) The data marked ※ in this report was provided by the customer and may affect the validity of the test results.

We are responsible for all the information of this test report except for the data(※) provided by the customer.

Tested by:


Murphy Kim

Technical
Manager:


Jinhyoung Cho

SGS Korea Co., Ltd. Gunpo Laboratory

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1. General Information

1.1. Testing Laboratory

SGS Korea Co., Ltd. (Gunpo Laboratory)

- 10-2, LS-ro 182beon-gil, Gunpo-si, Gyeonggi-do, Korea, 15807
- 4, LS-ro 182beon-gil, Gunpo-si, Gyeonggi-do, Korea, 15807
- Designation number: KR0150

All SGS services are rendered in accordance with the applicable SGS conditions of service available on request and accessible at <http://www.sgs.com/en/Terms-and-Conditions.aspx>.

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1.2. Details of Applicant

FCC Applicant : HYUNDAI MOBIS CO., LTD.

FCC Address : 203, Teheran-ro, Gangnam-gu, Seoul, South Korea, 135-977

IC Applicant : Hyundai MOBIS Co., Ltd

IC Address : 203, Teheran-ro, Gangnam-gu, Seoul, 135-977, Korea(Republic Of)

Contact Person : Choe, Seung-hoon

Phone No. : +82 31 260 0098

1.3. Details of Manufacturer

Company : Hyundai Mobis Co., Ltd.

Address : 203, Teheran-ro, Gangnam-gu, Seoul, 06141, Republic of Korea

1.4. Description of EUT

Kind of Product	Mission Service Platform
Model Name	LI99700200
Serial Number	863789050097240
Power Supply	DC 12.7 V
Rated Power	LTE Band 2, 4, 5, 7, 12, 13, 14, 25, 26, 66, 71: 23 dB m
Frequency Range	LTE Band 2: 1 850 MHz ~ 1 910 MHz LTE Band 4: 1 710 MHz ~ 1 755 MHz LTE Band 5: 824 MHz ~ 849 MHz LTE Band 7: 2 500 MHz ~ 2 570 MHz LTE Band 12: 699 MHz ~ 716 MHz LTE Band 13: 777 MHz ~ 787 MHz LTE Band 14: 788 MHz ~ 798 MHz LTE Band 25: 1 850 MHz ~ 1 915 MHz LTE Band 26(FCC Only): 814 MHz ~ 824 MHz LTE Band 26: 824 MHz ~ 849 MHz LTE Band 66: 1 710 MHz ~ 1 780 MHz LTE Band 71: 663 MHz ~ 698 MHz
Uplink CA Bands	5B, 7C, 66B, 66C
Modulation Technique	QPSK, 16QAM, 64QAM
Antenna Type	Monopole Antenna
Antenna Gain *	Refer to the clause 1.14
H/W Version	1.0
S/W Version	1.0
FVIN	N/A

1.5. Test Equipment List

Equipment	Manufacturer	Model	S/N	Cal. Date	Cal. Interval	Cal. Due
Signal Generator	R&S	SMA100B	106887	Oct. 13, 2022	Annual	Oct. 13, 2023
Signal Generator	R&S	SMBV100A	255834	May 25, 2022	Annual	May 25, 2023
Spectrum Analyzer	R&S	FSV30	103210	Dec. 07, 2022	Annual	Dec. 07, 2023
Spectrum Analyzer	Agilent	N9020A	MY53421758	Aug. 26, 2022	Annual	Aug. 26, 2023
Spectrum Analyzer	Agilent	N9030A	US51350132	Nov. 11, 2022	Annual	Nov. 11, 2023
Mobile Test Unit	R&S	CMW 500	144034	Feb. 17, 2023	Annual	Feb. 17, 2024
Communication Analyzer	Anritsu	MT8821C	6262192291	Oct. 11, 2022	Annual	Oct. 11, 2023
Power Meter	Anritsu	ML2495A	1223004	Nov. 29, 2022	Annual	Nov. 29, 2023
Power Sensor	Anritsu	MA2411B	1207272	May 27, 2022	Annual	May 27, 2023
Temperature Chamber	ESPEC CORP.	SH-662	93000533	Jun. 02, 2022	Annual	Jun. 02, 2023
Low Pass Filter	Mini-Circuits	NLP-1200+	V 8979400903-2	Feb. 09, 2023	Annual	Feb. 09, 2024
High Pass Filter	Wainwright Instrument GmbH	WHKX10-900-1000-18000-40SS	7	Mar. 04, 2022	Annual	Mar. 04, 2023
High Pass Filter	Wainwright Instrument GmbH	WHKX2.2/12.75G-10SS	8	Mar. 04, 2022	Annual	Mar. 04, 2023
High Pass Filter	Wainwright Instrument GmbH	WHKX3.0/18G-6SS	21	Jun. 09, 2022	Annual	Jun. 09, 2023
High Pass Filter	Wainwright Instrument GmbH	WHNX7.5/26.5G-6SS	11	Oct. 24, 2022	Annual	Oct. 24, 2023
BRIDGE COUPLER	MARKI MICROWAVE INC	CBR16-0012	1542	May 06, 2022	Annual	May 06, 2023
Directional Coupler	KRYTAR	152613	122660	Jul. 06, 2022	Annual	Jul. 06, 2023
DC Power Supply	R&S	HMP2020	102130	Apr. 22, 2022	Annual	Apr. 22, 2023
Preamplifier	H.P.	8447F	2944A03909	Aug. 04, 2022	Annual	Aug. 04, 2023
Preamplifier	R&S	SCU 18	10117	Jun. 13, 2022	Annual	Jun. 13, 2023
Preamplifier	MITEQ Inc.	JS44-18004000-35-8P	1546891	Sep. 27, 2022	Annual	Sep. 27, 2023
Test Receiver	R&S	ESCI 7	100911	Feb. 23, 2022	Annual	Feb. 23, 2023
Loop Antenna	Schwarzbeck Mess-Elektronik	FMZB 1519	1519-039	Aug. 23, 2021	Biennial	Aug. 23, 2023
Bilog Antenna	Schwarzbeck Mess-Elektronik	VULB9163	01126	Feb. 09, 2023	Annual	Feb. 09, 2024
Horn Antenna	R&S	HF906	100326	Feb. 18, 2022	Annual	Feb. 18, 2023
Horn Antenna	R&S	HF907	102270	Mar. 03, 2022	Annual	Mar. 03, 2023
Horn Antenna	Schwarzbeck Mess-Elektronik	BBHA 9170	9170-540	Nov. 30, 2022	Annual	Nov. 30, 2023
Antenna Master	Innco systems GmbH	MA4640-XP-ET	MA4640/536/383 30516/L	N.C.R.	N/A	N.C.R.
Turn Table	Innco systems GmbH	DS 1200S	N/A	N.C.R.	N/A	N.C.R.
Controller	Innco systems GmbH	CONTROLLER CO3000-4P	CO3000/963/383 30516/L	N.C.R.	N/A	N.C.R.
Anechoic Chamber	SY Corporation	L x W x H (9.6 m x 6.4 m x 6.6 m)	N/A	N.C.R.	N/A	N.C.R.
Coaxial Cable	RFONE	MWX221-NMSNMS (4 m)	J1023142	Oct. 04, 2022	Semi-Annual	Apr. 04, 2023
Coaxial Cable	Qualwave Inc.	QA500-18-NN-10 (10 m)	22200114	Oct. 04, 2022	Semi-Annual	Apr. 04, 2023
Coaxial Cable	RADIALL	TESTPRO 3	182287	Feb. 18, 2023	Semi-Annual	Aug. 18, 2023
Coaxial Cable	RADIALL	TESTPRO 3	182288	Feb. 18, 2023	Semi-Annual	Aug. 18, 2023
Coaxial Cable	RADIALL	TESTPRO 3	182291	Feb. 18, 2023	Semi-Annual	Aug. 18, 2023

Note;

- For equipment listed above that has a calibration date or calibration due date that falls within the test date range, care was taken to ensure that this equipment was used after the calibration date and before the calibration due date.

1.6. Summary of Test Results

The EUT has been tested according to the following specifications:

APPLIED STANDARD: FCC Part 2, 22, 24, 27 and 90 / IC RSS-Gen Issue 5, RSS-130 Issue 2, RSS-132 Issue 3, RSS-133 Issue 6, RSS-139 Issue 4, RSS-140 Issue 1 and RSS-199 Issue 3			
Section in FCC	Section in IC	Test Item(s)	Result
§2.1046 §22.913(a)(5) §24.232(c) §27.50(b)(9) §27.50(c)(9) §27.50(d)(4) §27.50(h)(2) §90.542(a)(7) §90.635(b)	RSS-130 Issue 2 4.6 RSS-132 Issue 3 5.4 RSS-133 Issue 6 6.4 RSS-139 Issue 4 5.5 RSS-140 Issue 1 4.3 RSS-199 Issue 3 4.4	E.R.P. / E.I.R.P.	Complied
§22.917(a) §24.238(a) §27.53(c)(2) §27.53(f) §27.53(g) §27.53(h)(1) §90.543(e) §90.543(f) §90.691(a)	RSS-130 Issue 2 4.7 RSS-132 Issue 3 5.5 RSS-133 Issue 6 6.5 RSS-139 Issue 4 5.6 RSS-140 Issue 1 4.4 RSS-199 Issue 3 4.5	Spurious Radiated Emission	Complied
§2.1046	RSS-Gen Issue 5 6.12	Conducted Output Power	Complied ¹⁾
§2.1049	RSS-Gen Issue 5 6.7	Occupied Bandwidth	Complied ¹⁾
§22.913(d) §24.232(d) §27.50(d)(5)	RSS-130 Issue 2 4.6 RSS-132 Issue 3 5.4 RSS-133 Issue 6 6.4 RSS-139 Issue 4 5.5 RSS-140 Issue 1 4.3 RSS-199 Issue 3 4.4	Peak-Average Ratio	Complied ¹⁾
§22.917(a) §24.238(a) §27.53(c)(2) §27.53(f) §27.53(g) §27.53(h)(1) §90.543(e) §90.543(f) §90.691(a)	RSS-130 Issue 2 4.7 RSS-132 Issue 3 5.5 RSS-133 Issue 6 6.5 RSS-139 Issue 4 5.6 RSS-140 Issue 1 4.4 RSS-199 Issue 3 4.5	Spurious Emission at Antenna Terminal	Complied ¹⁾
§22.917(a) §24.238(a) §27.53(c)(2) §27.53(c)(4) §27.53(g) §27.53(h)(1) §90.543(e) §90.691(a)	RSS-130 Issue 2 4.7 RSS-132 Issue 3 5.5 RSS-133 Issue 6 6.5 RSS-139 Issue 4 5.6 RSS-140 Issue 1 4.4 RSS-199 Issue 3 4.5	Band Edge and Emission Mask	Complied ¹⁾
§2.1055 §22.355 §24.235 §27.54 §90.213(a)	RSS-Gen Issue 5 6.11 RSS-130 Issue 2 4.5 RSS-132 Issue 3 5.3 RSS-133 Issue 6 6.3 RSS-139 Issue 4 5.4 RSS-140 Issue 1 4.2 RSS-199 Issue 3 4.3	Frequency Stability	Complied ¹⁾

Note;

1) The test items referenced from the LI99700020 (FCC ID: TQ8LI99700020 and IC Certification: 5074A-LI99700020).

The applicant takes full responsibility that the test data as referenced in this report represent compliance for this FCC ID and IC Certification.

Except for following, all other surrounding circuitry and layout are identical between LI99700200 and LI99700020.

1. LI99700020 has five WWAN modules but LI99700200 has two WWAN modules removed from three WWAN modules.

2. LI99700200 has different antennas from LI99700020.

The test results of LI99700020 (FCC ID: TQ8LI99700020 and IC certification: 5074A-LI99700020) were submitted for this application.

1.7. Sample Calculation for Offset

Where relevant, the following sample calculation is provided:

1.7.1. Conducted Test

Offset value (dB) = Directional Coupler (dB) + Cable loss (dB)

1.7.2. Radiation Test

- E.I.R.P. (dB m) = Measured level (dB μ V) + Antenna factor (dB/m) + Cable loss (dB) + 20 Log D - 104.8;
where D is the measurement distance in meters.
- E.R.P. (dB m) = E.I.R.P. (dB m) - 2.15 (dB)

1.8. Device Capabilities

This device contains the following capabilities;

LTE Band 2 (1 850 MHz ~ 1 910 MHz) is covered by LTE Band 25 (1 850 MHz ~ 1 915 MHz) due to overlapping frequency range, same maximum tune-up limit and same channel bandwidth. Therefore test data provided in this report covers LTE Band 2 as well as Band 25.

LTE Band 4 (1 710 MHz ~ 1 755 MHz) is covered by LTE Band 66 (1 710 MHz ~ 1 780 MHz) due to overlapping frequency range, same maximum tune-up limit and same channel bandwidth. Therefore test data provided in this report covers LTE Band 4 as well as Band 66.

LTE Band 5 (824 MHz ~ 849 MHz) is covered by LTE Band 26 (824 MHz ~ 849 MHz) due to overlapping frequency range, same maximum tune-up limit and same channel bandwidth. Therefore test data provided in this report covers LTE Band 5 as well as Band 26.

1.9. Manufacturer Declaration

EUT has two (SIM1 and SIM2) ports each with a port-specific antenna.

1.10. Worst Case Configuration and Mode

Since all ports have the same module, representatively, all test items were performed on port 1. Radiated spurious emissions were tested separately because the antennas are all different.

The worst-case is based on the conducted output power measurement investigation results. All testing was performed using QPSK, 16QAM and 64QAM modulations. However, the spurious radiated emission and spurious at antenna terminal were only performed on bandwidth and RB offset (with RB size 1) with the highest conducted power in QPSK.

The peak to average ratio were tested only 64QAM modulation as worst case.

The radiation test of the EUT was investigated in three orthogonal orientations X, Y, and Z, and the worst case data is reported.

1.11. Measurement Configuration

Test Items	Band	Test Channel			Bandwidth (MHz)						Modulation			RB #		
		Low	Mid	High	1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full
Conducted Output Power	7	V	V	V			V	V	V	V	V	V	V	V	V	V
	12	V	V	V	V	V	V	V			V	V	V	V	V	V
	13	V	V	V			V	V			V	V	V	V	V	V
	14	V	V	V			V	V			V	V	V	V	V	V
	25/2	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
	*26/5 Part22	V	V	V	V	V	V	V	V		V	V	V	V	V	V
	26 Part90	V	V	V	V	V	V	V	V		V	V	V	V	V	V
	66/4	V	V	V	V	V	V	V	V	V	V	V	V	V	V	V
	71	V	V	V			V	V	V	V	V	V	V	V	V	V
Frequency Stability	7	-	V	-			V	-	-	-	V	-	-	-	-	V
	12	-	V	-	-	-	V	-			V	-	-	-	-	V
	13	-	V	-			V	-			V	-	-	-	-	V
	14	-	V	-			V	-			V	-	-	-	-	V
	25/2	-	V	-	-	-	V	-	-	-	V	-	-	-	-	V
	*26/5 Part22	-	V	-	-	-	V	-	-		V	-	-	-	-	V
	26 Part90	-	V	-	-	-	V	-	-		V	-	-	-	-	V
	66/4	-	V	-	-	-	V	-	-	-	V	-	-	-	-	V
	71	-	V	-			V	-	-	-	V	-	-	-	-	V
Occupied Bandwidth	7	-	V	-			V	V	V	V	V	V	-	-	-	V
	12	-	V	-	V	V	V	V			V	V	-	-	-	V
	13	-	V	-			V	V			V	V	-	-	-	V
	14	-	V	-			V	V			V	V	-	-	-	V
	25/2	-	V	-	V	V	V	V	V	V	V	V	-	-	-	V
	*26/5 Part22	-	V	-	V	V	V	V	V		V	V	-	-	-	V
	26 Part90	-	V	-	V	V	V	V	V		V	V	-	-	-	V
	66/4	-	V	-	V	V	V	V	V	V	V	V	-	-	-	V
	71	-	V	-			V	V	V	V	V	V	-	-	-	V
Peak-to-Average Ratio	7	V	V	V			V	V	V	V	-	-	V	-	-	V
	12	V	V	V	V	V	V	V			-	-	V	-	-	V
	13	V	V	V			V	V			-	-	V	-	-	V
	14	V	V	V			V	V			-	-	V	-	-	V
	25/2	V	V	V	V	V	V	V	V	V	-	-	V	-	-	V
	*26/5 Part22	V	V	V	V	V	V	V	V		-	-	V	-	-	V
	26 Part90	V	V	V	V	V	V	V	V		-	-	V	-	-	V
	66/4	V	V	V	V	V	V	V	V	V	-	-	V	-	-	V
	71	V	V	V			V	V	V	V	-	-	V	-	-	V

Test Items	Band	Test Channel			Bandwidth (MHz)						Modulation			RB #		
		Low	Mid	High	1.4	3	5	10	15	20	QPSK	16QAM	64QAM	1	Half	Full
Band edge	7	V	-	V			V	V	V	V	V	V	-	V	-	V
	12	V	-	V	V	V	V	V			V	V	-	V	-	V
	13	V	-	V			V	V			V	V	-	V	-	V
	14	V	-	V			V	V			V	V	-	V	-	V
	25/2	V	-	V	V	V	V	V	V	V	V	V	-	V	-	V
	*26/5 Part22	V	-	V	V	V	V	V	V		V	V	-	V	-	V
	26 Part90	V	-	V	V	V	V	V	V		V	V	-	V	-	V
	66/4	V	-	V	V	V	V	V	V	V	V	V	-	V	-	V
	71	V	-	V			V	V	V	V	V	V	-	V	-	V
Spurious at antenna terminal & Radiated Spurious Emissions	7	V	V	V	Worst case											
	12	V	V	V	Worst case											
	13	V	V	V	Worst case											
	14	V	V	V	Worst case											
	25/2	V	V	V	Worst case											
	*26/5 Part22	V	V	V	Worst case											
	26 Part90	V	V	V	Worst case											
	66/4	V	V	V	Worst case											
	71	V	V	V	Worst case											

*B5 is not supported 15M bandwidth.

1.12. Measurement Uncertainty

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

Parameter	Uncertainty	
RF Output Power	0.32 dB	
Occupied Bandwidth	3.90 kHz	
Conducted Spurious Emissions	0.61 dB	
Peak to Average Ratio	0.60 dB	
Frequency Stability	5.97 kHz	
Radiated Emission, 9 kHz to 30 MHz	H	3.40 dB
	V	3.40 dB
Radiated Emission, below 1 GHz	H	4.50 dB
	V	5.10 dB
Radiated Emission, above 1 GHz	H	3.70 dB
	V	3.90 dB

All measurement uncertainty values are shown with a coverage factor of $k=2$ to indicate a 95 % level of confidence.

1.13. Test Report Revision

Revision	Report Number	Date of Issue	Description
0	F690501-RF-RTL003855	2023.02.28	Initial

1.14. Antenna Designation

Operating Frequency (MHz)		Antenna Peak Gain (dB i)			
		Ant. No	Ant. Gain	Cable Loss ¹⁾	Final Gain ²⁾
Band 71	663 ~ 698	Ant. 1	2.63	0.63	2.00
		Ant. 2	4.03	0.63	3.40
Band 12	699 ~ 716	Ant. 1	2.63	0.63	2.00
		Ant. 2	4.03	0.63	3.40
Band 13	777 ~ 787	Ant. 1	2.60	0.72	1.88
		Ant. 2	1.31	0.72	0.59
Band 14	788 ~ 798	Ant. 1	2.60	0.72	1.88
		Ant. 2	1.31	0.72	0.59
Band 26 Part 90	814 ~ 824	Ant. 1	1.98	0.72	1.26
		Ant. 2	1.22	0.72	0.50
Band 26/5 Part 22	824 ~ 849	Ant. 1	1.98	0.72	1.26
		Ant. 2	1.80	0.72	1.08
Band 66/4	1 710 ~ 1 780	Ant. 1	-1.48	1.08	-2.56
		Ant. 2	-0.95	1.08	-2.03
Band 25/2	1 850 ~ 1 915	Ant. 1	-0.05	1.08	-1.13
		Ant. 2	0.07	1.08	-1.01
Band 7	2 500 ~ 2 570	Ant. 1	3.53	1.21	2.32
		Ant. 2	2.67	1.21	1.46

Note;

1) It is a cable that is permanently connected between the antenna and the EUT

2) In this report, Final gain reflecting the cable loss was used.

1.15. Emission Designator and Max Power

ANT 1

Band	Band width (MHz)	Modulation	Low Freq. (MHz)	Upper Freq. (MHz)	Maximum conducted power (dB m)	Ant. Gain (dB i)	E.R.P. / E.I.R.P. (dB m)	E.R.P. / E.I.R.P. (W)	Emission Designator
71	5	QPSK	665.5	695.5	23.01	2.00	25.01	0.317	4M51G7D
		16QAM			22.46		24.46	0.279	4M49D7D
	10	QPSK	668	693	23.19		25.19	0.330	8M95G7D
		16QAM			22.57		24.57	0.286	8M95D7D
	15	QPSK	670.5	690.5	23.25		25.25	0.335	13M5G7D
		16QAM			22.52		24.52	0.283	13M4D7D
	20	QPSK	673	688	23.24		25.24	0.334	18M0G7D
		16QAM			22.53		24.53	0.284	17M8D7D
12	1.4	QPSK	699.7	715.3	23.53	2.00	25.53	0.357	1M09G7D
		16QAM			22.82		24.82	0.303	1M09D7D
	3	QPSK	700.5	714.5	23.43		25.43	0.349	2M69G7D
		16QAM			23.02		25.02	0.318	2M68D7D
	5	QPSK	701.5	713.5	23.61		25.61	0.364	4M49G7D
		16QAM			22.99		24.99	0.316	4M49D7D
	10	QPSK	704	711	23.60		25.60	0.363	8M95G7D
		16QAM			22.96		24.96	0.313	8M92D7D
13	5	QPSK	779.5	784.5	23.65	1.88	25.53	0.357	4M49G7D
		16QAM			23.23		25.11	0.324	4M53D7D
	10	782	23.60		25.48		0.353	8M95G7D	
			23.01		24.89		0.308	8M95D7D	
14	5	QPSK	790.5	795.5	22.87	1.88	24.75	0.299	4M50G7D
		16QAM			22.15		24.03	0.253	4M50D7D
	10	793	22.98		24.86		0.306	8M97G7D	
			22.15		24.03		0.253	8M94D7D	
26 Part 90	1.4	QPSK	814.4	823.3	23.26	1.26	24.52	0.283	1M10G7D
		16QAM			22.71		23.97	0.249	1M09D7D
	3	QPSK	815.5	822.5	23.40		24.66	0.292	2M68G7D
		16QAM			22.83		24.09	0.256	2M68D7D
	5	QPSK	816.5	821.5	23.55		24.81	0.303	4M51G7D
		16QAM			22.82		24.08	0.256	4M53D7D
	10	QPSK	819	23.56	24.82		0.303	8M92G7D	
		16QAM		22.80	24.06		0.255	8M92D7D	
	15	QPSK	821.5	23.53	24.79		0.301	13M4G7D	
		16QAM		22.91	24.17		0.261	13M5D7D	

Band	Band width (MHz)	Modulation	Low Freq. (MHz)	Upper Freq. (MHz)	Maximum conducted power (dB m)	Ant. Gain (dB i)	E.R.P. / E.I.R.P. (dB m)	E.R.P. / E.I.R.P. (W)	Emission Designator
26/5 Part 22	1.4	QPSK	824.7	848.3	23.19	1.26	24.45	0.279	1M09G7D
		16QAM			22.63		23.89	0.245	1M09D7D
	3	QPSK	825.5	847.5	23.36		24.62	0.290	2M68G7D
		16QAM			22.84		24.10	0.257	2M68D7D
	5	QPSK	826.5	846.5	23.31		24.57	0.286	4M49G7D
		16QAM			22.76		24.02	0.252	4M49D7D
	10	QPSK	829	844	23.55		24.81	0.303	8M95G7D
		16QAM			22.99		24.25	0.266	8M92D7D
	15	QPSK	831.5	841.5	23.54		24.80	0.302	13M5G7D
		16QAM			22.96		24.22	0.264	13M4D7D
66/4	1.4	QPSK	1 710.7	1 779.3	22.94	-2.56	20.38	0.109	1M09G7D
		16QAM			22.31		19.75	0.094	1M09D7D
	3	QPSK	1 711.5	1 778.5	23.05		20.49	0.112	2M68G7D
		16QAM			22.40		19.84	0.096	2M69D7D
	5	QPSK	1 712.5	1 777.5	23.10		20.54	0.113	4M49G7D
		16QAM			22.45		19.89	0.097	4M49D7D
	10	QPSK	1 715	1 775	22.96		20.40	0.110	8M95G7D
		16QAM			22.39		19.83	0.096	8M95D7D
	15	QPSK	1 717.5	1 772.5	23.24		20.68	0.117	13M5G7D
		16QAM			22.68		20.12	0.103	13M5D7D
	20	QPSK	1 720	1 770	23.16		20.60	0.115	17M9G7D
		16QAM			22.50		19.94	0.099	17M9D7D
25/2	1.4	QPSK	1 850.7	1 914.3	22.84	-1.13	21.71	0.148	1M09G7D
		16QAM			22.20		21.07	0.128	1M10D7D
	3	QPSK	1 851.5	1 913.5	23.02		21.89	0.155	2M68G7D
		16QAM			22.36		21.23	0.133	2M68D7D
	5	QPSK	1 852.5	1 912.5	22.90		21.77	0.150	4M51G7D
		16QAM			22.38		21.25	0.133	4M49D7D
	10	QPSK	1 855	1 910	22.98		21.85	0.153	8M95G7D
		16QAM			22.31		21.18	0.131	8M89D7D
	15	QPSK	1 857.5	1 907.5	23.11		21.98	0.158	13M5G7D
		16QAM			22.60		21.47	0.140	13M5D7D
	20	QPSK	1 860	1 905	23.06		21.93	0.156	17M9G7D
		16QAM			22.44		21.31	0.135	17M9D7D
7	5	QPSK	2 502.5	2 567.5	22.47	2.32	24.79	0.301	4M51G7D
		16QAM			21.89		24.21	0.264	4M49D7D
	10	QPSK	2 505	2 565	22.81		25.13	0.326	8M95G7D
		16QAM			22.01		24.33	0.271	8M95D7D
	15	QPSK	2 507.5	2 562.5	22.95		25.27	0.337	13M4G7D
		16QAM			21.87		24.19	0.262	13M5D7D
	20	QPSK	2 510	2 560	23.14		25.46	0.352	17M9G7D
		16QAM			22.34		24.66	0.292	17M9D7D

ANT 2

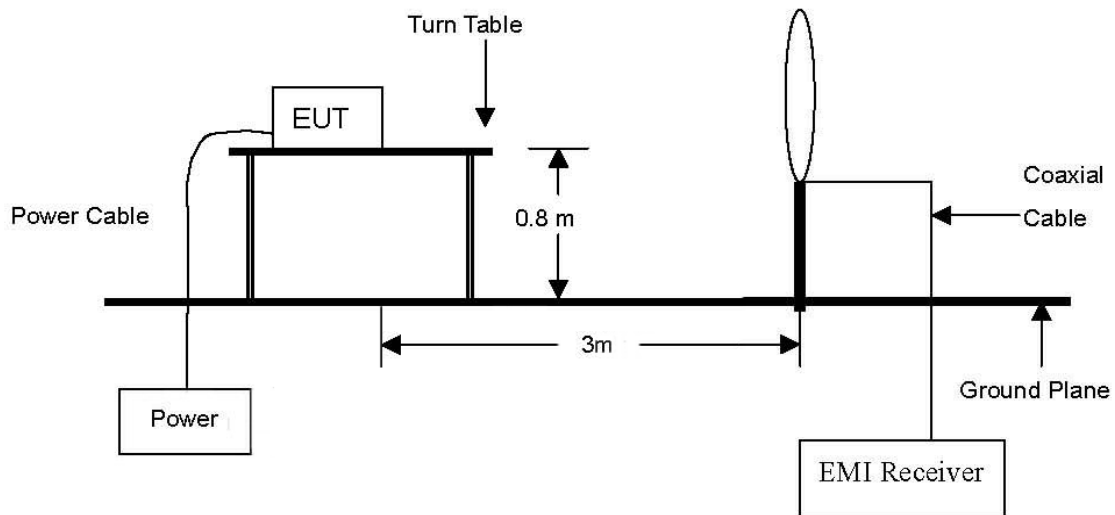
Band	Band width (MHz)	Modulation	Low Freq. (MHz)	Upper Freq. (MHz)	Maximum conducted power (dB m)	Ant. Gain (dB i)	E.R.P. / E.I.R.P. (dB m)	E.R.P. / E.I.R.P. (W)	Emission Designator
71	5	QPSK	665.5	695.5	23.01	3.40	26.41	0.438	4M51G7D
		16QAM			22.46		25.86	0.385	4M49D7D
	10	QPSK	668	693	23.19		26.59	0.456	8M95G7D
		16QAM			22.57		25.97	0.395	8M95D7D
	15	QPSK	670.5	690.5	23.25		26.65	0.462	13M5G7D
		16QAM			22.52		25.92	0.391	13M4D7D
	20	QPSK	673	688	23.24		26.64	0.461	18M0G7D
		16QAM			22.53		25.93	0.392	17M8D7D
12	1.4	QPSK	699.7	715.3	23.53	3.40	26.93	0.493	1M09G7D
		16QAM			22.82		26.22	0.419	1M09D7D
	3	QPSK	700.5	714.5	23.43		26.83	0.482	2M69G7D
		16QAM			23.02		26.42	0.439	2M68D7D
	5	QPSK	701.5	713.5	23.61		27.01	0.502	4M49G7D
		16QAM			22.99		26.39	0.436	4M49D7D
	10	QPSK	704	711	23.60		27.00	0.501	8M95G7D
		16QAM			22.96		26.36	0.433	8M92D7D
13	5	QPSK	779.5	784.5	23.65	0.59	24.24	0.265	4M49G7D
		16QAM			23.23		23.82	0.241	4M53D7D
	10	782	23.60		24.19		0.262	8M95G7D	
			23.01		23.60		0.229	8M95D7D	
14	5	QPSK	790.5	795.5	22.87	0.59	23.46	0.222	4M50G7D
		16QAM			22.15		22.74	0.188	4M50D7D
	10	793	22.98		23.57		0.228	8M97G7D	
			22.15		22.74		0.188	8M94D7D	
26 Part 90	1.4	QPSK	814.4	823.3	23.26	0.50	23.76	0.238	1M10G7D
		16QAM			22.71		23.21	0.209	1M09D7D
	3	QPSK	815.5	822.5	23.40		23.90	0.245	2M68G7D
		16QAM			22.83		23.33	0.215	2M68D7D
	5	QPSK	816.5	821.5	23.55		24.05	0.254	4M51G7D
		16QAM			22.82		23.32	0.215	4M53D7D
	10	QPSK	819	23.56	24.06		0.255	8M92G7D	
		16QAM		22.80	23.30		0.214	8M92D7D	
	15	QPSK	821.5	23.53	24.03		0.253	13M4G7D	
		16QAM		22.91	23.41		0.219	13M5D7D	

Band	Band width (MHz)	Modulation	Low Freq. (MHz)	Upper Freq. (MHz)	Maximum conducted power (dB m)	Ant. Gain (dB i)	E.R.P. / E.I.R.P. (dB m)	E.R.P. / E.I.R.P. (W)	Emission Designator
26/5 Part 22	1.4	QPSK	824.7	848.3	23.19	1.08	24.27	0.267	1M09G7D
		16QAM			22.63		23.71	0.235	1M09D7D
	3	QPSK	825.5	847.5	23.36		24.44	0.278	2M68G7D
		16QAM			22.84		23.92	0.247	2M68D7D
	5	QPSK	826.5	846.5	23.31		24.39	0.275	4M49G7D
		16QAM			22.76		23.84	0.242	4M49D7D
	10	QPSK	829	844	23.55		24.63	0.290	8M95G7D
		16QAM			22.99		24.07	0.255	8M92D7D
26 Part 22	15	QPSK	831.5	841.5	23.54	-2.03	24.62	0.290	13M5G7D
		16QAM			22.96		24.04	0.254	13M4D7D
66/4	1.4	QPSK	1 710.7	1 779.3	22.94		20.91	0.123	1M09G7D
		16QAM			22.31		20.28	0.107	1M09D7D
	3	QPSK	1 711.5	1 778.5	23.05		21.02	0.126	2M68G7D
		16QAM			22.40		20.37	0.109	2M69D7D
	5	QPSK	1 712.5	1 777.5	23.10		21.07	0.128	4M49G7D
		16QAM			22.45		20.42	0.110	4M49D7D
	10	QPSK	1 715	1 775	22.96		20.93	0.124	8M95G7D
		16QAM			22.39		20.36	0.109	8M95D7D
	15	QPSK	1 717.5	1 772.5	23.24		21.21	0.132	13M5G7D
		16QAM			22.68		20.65	0.116	13M5D7D
	20	QPSK	1 720	1 770	23.16		21.13	0.130	17M9G7D
		16QAM			22.50		20.47	0.111	17M9D7D
25/2	1.4	QPSK	1 850.7	1 914.3	22.84	-1.01	21.83	0.152	1M09G7D
		16QAM			22.20		21.19	0.132	1M10D7D
	3	QPSK	1 851.5	1 913.5	23.02		22.01	0.159	2M68G7D
		16QAM			22.36		21.35	0.136	2M68D7D
	5	QPSK	1 852.5	1 912.5	22.90		21.89	0.155	4M51G7D
		16QAM			22.38		21.37	0.137	4M49D7D
	10	QPSK	1 855	1 910	22.98		21.97	0.157	8M95G7D
		16QAM			22.31		21.30	0.135	8M89D7D
	15	QPSK	1 857.5	1 907.5	23.11		22.10	0.162	13M5G7D
		16QAM			22.60		21.59	0.144	13M5D7D
	20	QPSK	1 860	1 905	23.06		22.05	0.160	17M9G7D
		16QAM			22.44		21.43	0.139	17M9D7D
7	5	QPSK	2 502.5	2 567.5	22.47	1.46	23.93	0.247	4M51G7D
		16QAM			21.89		23.35	0.216	4M49D7D
	10	QPSK	2 505	2 565	22.81		24.27	0.267	8M95G7D
		16QAM			22.01		23.47	0.222	8M95D7D
	15	QPSK	2 507.5	2 562.5	22.95		24.41	0.276	13M4G7D
		16QAM			21.87		23.33	0.215	13M5D7D
	20	QPSK	2 510	2 560	23.14		24.60	0.288	17M9G7D
		16QAM			22.34		23.80	0.240	17M9D7D

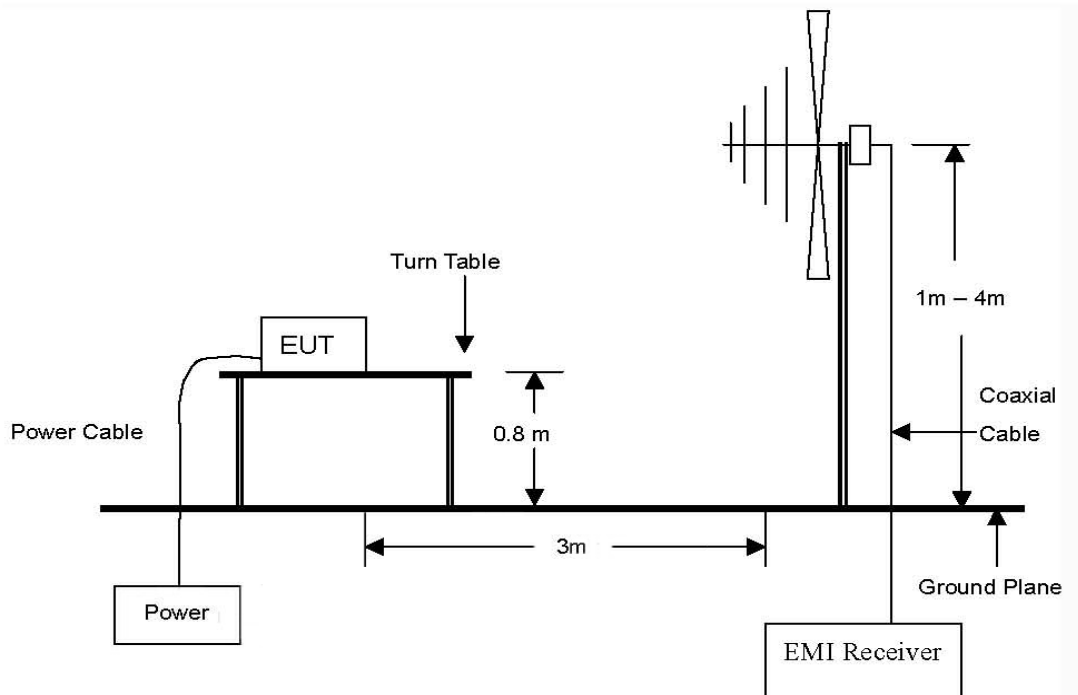
2. E.R.P. / E.I.R.P. & Spurious Radiated Emission

2.1. Test setup

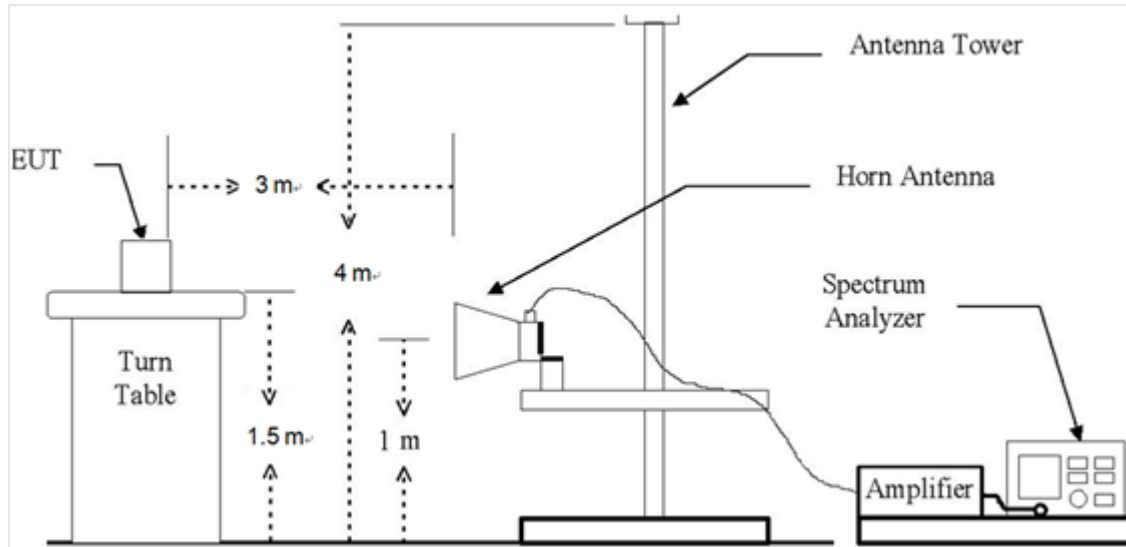
The diagram below shows the test setup that is utilized to make the measurements for emission from 9 kHz to 30 MHz.



The diagram below shows the test setup that is utilized to make the measurements for emission from 30 MHz to 1 GHz Emissions.



The diagram below shows the test setup that is utilized to make the measurements for emission from 1 GHz to 26 GHz Emissions.



2.2. Limit

2.2.1. Limit of E.R.P. / E.I.R.P.

FCC

- §22.913(a)(5), the ERP of mobile transmitters and auxiliary test transmitters must not exceed 7 watts.
- §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.
- §27.50(b)(9), Control stations and mobile stations transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz band and fixed stations transmitting in the 787-788 MHz and 805-806 MHz band are limited to 30 watts ERP.
- §27.50(c)(9), Control and mobile stations in the 698-746 MHz band are limited to 30 watts ERP.
- §27.50(d)(4), fixed, mobile, and portable (hand-held) stations operating in the 1 710-1 755 MHz band and mobile and portable stations operating in the 1 695-1 710 MHz and 1 755-1 780 MHz bands are limited to 1 watt EIRP.
- §27.50(h)(2), Mobile and other user stations. Mobile stations are limited to 2.0 watts EIRP. All user stations are limited to 2.0 watts transmitter output power.
- §90.542(a)(7), Portable stations (hand-held devices) transmitting in the 758-768 MHz band and the 788-798 MHz band are limited to 3 watts ERP.
- §90.635(b), the maximum output power of the transmitter for mobile stations is 100 watts (20 dBW).

IC

- RSS-130 Issue 2

4.6.2, The e.r.p. shall not exceed 3 watts for mobile equipment, fixed subscriber equipment and portable equipment.

For base and fixed equipment other than fixed subscriber equipment, refer to SRSP-518 for the equivalent isotropically radiated power (e.i.r.p.) limits.

4.6.3, the e.r.p. shall not exceed 30 watts for mobile equipment and outdoor fixed subscriber equipment. The e.r.p. shall not exceed 3 watts for portable equipment and indoor fixed subscriber equipment.

For base and fixed equipment other than fixed subscriber equipment, refer to SRSP-518 for the e.i.r.p. limits.

- RSS-132 Issue 3

5.4, the transmitter output power shall be measured in terms of average power.

The equivalent isotropically radiated power (e.i.r.p.) for mobile equipment shall not exceed 11.5 watts.

Refer to SRSP-503 for base station e.i.r.p. limits.

- RSS-133 Issue 6

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

- RSS-139 Issue 4

5.5, The maximum output power of the equipment shall comply with the limits specified below. In the tables, maximum power refers to the equivalent isotropically radiated power (e.i.r.p.) or total radiated power (TRP), measured in terms of average values.

Table 3: Maximum power of equipment in the band 1 710-1 780 MHz

Equipment type	Maximum power
Fixed station and base station	30 dBm e.i.r.p./ channel bandwidth
Subscriber equipment	30 dBm e.i.r.p./ channel bandwidth

- RSS-140 Issue 1

4.3, The equivalent radiated power (e.r.p.) for control and mobile equipment shall not exceed 30 W. The e.r.p. for portable equipment including handheld devices shall not exceed 3 W.

- RSS-199 Issue 3

4.4, the transmitter output power shall be measured in terms of average value.

For base station equipment, refer to SRSP-517 for the maximum permissible e.i.r.p.

For mobile subscriber equipment, the e.i.r.p. shall not exceed 2 W. For fixed subscriber equipment, the transmitter output power shall not exceed 2 W and the e.i.r.p. shall be limited to 40 W.

2.2.2. Limit of Spurious Radiated Emission

FCC

- §22.917(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10\log(P)$ dB.

- §24.238(a), the power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitting power (P) by a factor of at least $43 + 10 \log(P)$ dB.

- §27.53(c)(2), on any frequency outside the 776-788 MHz band, the power of any emission shall be attenuated outside the band below the transmitter power (P) by at least $43 + 10 \log (P)$ dB.

- §27.53(f), For operations in the 746-758 MHz, 775-788 MHz, and 805-806 MHz bands, emissions in the band 1 559-1 610 MHz shall be limited to -70 dB W/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dB W EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

- §27.53(g), the power of any emission outside a licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, by at least $43 + 10 \log (P)$ dB.

- §27.53(h)(1), for operations in the 1 695-1 710 MHz, 1 710-1 755 MHz, 1 755-1 780 MHz, 1 915-1 920 MHz, 1 995-2 000 MHz, 2 000-2 020 MHz, 2 110-2 155 MHz, 2 155-2 180 MHz, and 2 180-2 200 bands, the power of any emission outside a licensee's frequency block shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ dB.

- §90.543(e), For operations in the 758-768 MHz and the 788-798 MHz bands, the power of any emission outside the licensee's frequency band(s) of operation shall be attenuated below the transmitter power (P) within the licensed band(s) of operation, measured in watts, in accordance with the following:

(1) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than $76 + 10 \log (P)$ dB in a 6.25 kHz band segment, for base and fixed stations.

(2) On all frequencies between 769-775 MHz and 799-805 MHz, by a factor not less than $65 + 10 \log (P)$ dB in a 6.25 kHz band segment, for mobile and portable stations.

(3) On any frequency between 775-788 MHz, above 805 MHz, and below 758 MHz, by at least $43 + 10 \log (P)$ dB.

(4) Compliance with the provisions of paragraphs (e)(1) and (2) of this section is based on the use of measurement instrumentation such that the reading taken with any resolution bandwidth setting should be adjusted to indicate spectral energy in a 6.25 kHz segment.

(5) Compliance with the provisions of paragraph (e)(3) of this section is based on the use of measurement instrumentation employing a resolution bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency block, a resolution bandwidth of 30 kHz may be employed.

- §90.543(f), For operations in the 758-775 MHz and 788-805 MHz bands, all emissions including harmonics in the band 1 559-1 610 MHz shall be limited to -70 dB W/MHz equivalent isotropically radiated power (EIRP) for wideband signals, and -80 dB W EIRP for discrete emissions of less than 700 Hz bandwidth. For the purpose of equipment authorization, a transmitter shall be tested with an antenna that is representative of the type that will be used with the equipment in normal operation.

- §90.691(a), out-of-band emission requirement shall apply only to the "outer" channels included in an EA license and to spectrum adjacent to interior channels used by incumbent licensees. The emission limits are

as follows:

(1) For any frequency removed from the EA licensee's frequency block by up to and including 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $116 \log_{10} (f / 6.1)$ decibels or $50 + 10 \log_{10} (P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 12.5 kHz.

(2) For any frequency removed from the EA licensee's frequency block greater than 37.5 kHz, the power of any emission shall be attenuated below the transmitter power (P) in watts by at least $43 + 10 \log_{10} (P)$ decibels or 80 decibels, whichever is the lesser attenuation, where f is the frequency removed from the center of the outer channel in the block in kilohertz and where f is greater than 37.5 kHz.

IC

- RSS-130 Issue 2

4.7.1, the unwanted emissions in any 100 kHz bandwidth on any frequency outside the low frequency edge and the high frequency edge of each frequency block range(s), shall be attenuated below the transmitter power, P (dB W), by at least $43 + 10 \log_{10} p$ (watts), dB. However, in the 100 kHz band immediately outside of the equipment's frequency block range, a resolution bandwidth of 30 kHz may be employed.

4.7.2 In addition to the limit outlined in section 4.7.1 above, equipment operating in the frequency bands 746-756 MHz and 777-787 MHz shall also comply with the following restrictions:

a) The power of any unwanted emissions in any 6.25 kHz bandwidth for all frequencies between 763-775 MHz and 793-806 MHz shall be attenuated below the transmitter power, P (dB W), by at least:

(i) $76 + 10 \log_{10} p$ (watts), dB, for base and fixed equipment, and

(ii) $65 + 10 \log_{10} p$ (watts), dB, for mobile and portable equipment.

b) The e.i.r.p. in the band 1 559-1 610 MHz shall not exceed -70 dB W/MHz for wideband signal and -80 dB W for discrete emission with bandwidth less than 700 Hz.

- RSS-132 Issue 3

5.5, Mobile and base station equipment shall comply with the limits in (i) and (ii) below.

(i) In the first 1.0 MHz band immediately outside and adjacent to each of the sub-bands specified in Section 5.1, the power of emissions per any 1 % of the occupied bandwidth shall be attenuated (in dB) below the transmitter output power P (dB W) by at least $43 + 10 \log_{10} p$ (watts).

(ii) After the first 1.0 MHz immediately outside and adjacent to each of the sub-bands, the power of emissions in any 100 kHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dB W) by at least $43 + 10 \log_{10} p$ (watts). If the measurement is performed using 1 % of the occupied bandwidth, power integration over 100 kHz is required.

- RSS-133 Issue 6

6.5, Equipment shall comply with the limits in (i) and (ii) below.

(i) In the 1.0 MHz bands immediately outside and adjacent to the equipment's operating frequency block, the emission power per any 1 % of the emission bandwidth shall be attenuated (in dB) below the transmitter output power P (dB W) by at least $43 + 10 \log_{10} p(\text{watts})$.

(ii) After the first 1.0 MHz, the emission power in any 1 MHz bandwidth shall be attenuated (in dB) below the transmitter output power P (dB W) by at least $43 + 10 \log_{10} p(\text{watts})$. If the measurement is performed using 1 % of the emission bandwidth, power integration over 1.0 MHz is required.

- RSS-139 Issue 4

5.6, Unwanted emissions shall be measured in terms of average values.

For all equipment, the TRP or total conducted power (sum of conducted power across all antenna connectors) of the unwanted emissions outside the frequency block or frequency block group shall not exceed the limits shown in table 6.

Table 3: Unwanted emission limits

Offset from the edge of the frequency block or frequency block group	Unwanted emission limit
1 MHz	-13 dB m/(1% of OB)*
>1 MHz	-13 dB m

* OB is the occupied bandwidth

- RSS-140 Issue 1

4.4, The power of any unwanted emission outside the bands 758-768 MHz and 788-798 MHz shall be attenuated below the transmitter output power P in dB W as follows, where p is the transmitter output power in watts:

a) For any frequency between 769-775 MHz and 799-806 MHz:

i) $76 + 10 \log(p)$, dB in a 6.25 kHz band for fixed and base station equipment

ii) $65 + 10 \log(p)$, dB in a 6.25 kHz band for mobile and portable/hand-held equipment

b) For any frequency between 775-788 MHz, above 806 MHz, and below 758 MHz: $43 + 10 \log(p)$, dB in a bandwidth of 100 kHz or greater. However, in the 100 kHz bands immediately outside and adjacent to the frequency bands 758-768 MHz and 788-798 MHz, a resolution bandwidth of 30 kHz may be employed.

In addition, the equivalent isotropically radiated power (e.i.r.p.) of all emissions, including harmonics in the band 1 559-1 610 MHz, shall not exceed -70 dB W /MHz for wideband emissions, and -80 dB W /kHz for discrete emissions of less than 700 Hz bandwidth.

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4.5, In the 1 MHz band immediately outside and adjacent to the channel edge, the unwanted emission power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for base station and fixed subscriber equipment, and 2% for mobile subscriber equipment. Beyond the 1 MHz band, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth can be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% or 2% of the occupied bandwidth, as applicable.

Equipment shall comply with the following unwanted emission limits:

for base station and fixed subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dB W), by at least $43 + 10 \log_{10} p$ for mobile

subscriber equipment, the power of any unwanted emissions measured as above shall be attenuated (in dB) below the transmitter power, P (dB W), by at least:

- i. $40 + 10 \log_{10} p$ from the channel edges to 5 MHz away
- ii. $43 + 10 \log_{10} p$ between 5 MHz and X MHz from the channel edges, and
- iii. $55 + 10 \log_{10} p$ at X MHz and beyond from the channel edges

In addition, the attenuation shall not be less than $43 + 10 \log_{10} p$ on all frequencies between 2 490.5 MHz and 2 496 MHz, and $55 + 10 \log_{10} p$ at or below 2 490.5 MHz.

In (a) and (b), p is the transmitter power measured in watts and X is 6 MHz or the equipment occupied bandwidth, whichever is greater.

2.3. Test Procedure: Based on ANSI/TIA 603E: 2016 and ANSI C63.26-2015 and KDB 971168 D01 Power Meas License Digital Systems v03r01.

1. On a test site, the EUT shall be placed at 0.8 m or 1.5 m height on a turn table, and in the position close to normal use as declared by the applicant.
2. The test antenna shall be oriented initially for vertical polarization located 3 m from EUT to correspond to the fundamental frequency of the transmitter.
3. The output of the test antenna shall be connected to the measuring receiver and the peak detector is used for the measurement.
4. Radiated spurious emissions measurement method was set as follows:
RBW = 100 kHz for emissions below 1 GHz and 1 MHz for emissions above 1 GHz, VBW ≥ 3 x RBW,
Detector = RMS, trace mode = max hold, per the guidelines of KDB 971168 D01 Power Meas License Digital Systems v03r01.
5. The transmitter shall be switched on, the measuring receiver shall be tuned to the frequency of the transmitter under test.
6. The test antenna shall be raised and lowered through the specified range of height until the maximum signal level is detected by the measuring receiver.
7. The transmitter shall be rotated through 360° in the horizontal plane, until the maximum signal level is detected by the measuring receiver.
8. The test antenna shall be raised and lowered again through the specified range of height until the maximum signal level is detected by the measuring receiver.
9. The maximum signal level detected by the measuring receiver shall be noted.
10. In necessary, the input attenuator setting on the measuring receiver shall be adjusted in order to increase the sensitivity of the measuring receiver.
11. The test antenna shall be raised and lowered through the specified range of height to ensure that the maximum signal is received.
12. The measurement shall be repeated with the test antenna orientated for horizontal polarization.

2.4. Test results

Ambient temperature : (23 ± 1) °C
Relative humidity : 47 % R.H.

2.4.1. E.R.P. / E.I.R.P.

ANT 1

Band	Frequency (MHz)	Maximum Conducted Power (dB m)	Maximum Conducted Power (W)	Antenna Gain (dB i)	Maximum E.I.R.P. (dB m)	Maximum E.I.R.P. (W)	Maximum E.R.P. (dB m)	Maximum E.R.P. (W)	Limit
71	663 ~ 698	23.25	0.211	2.00	25.25	0.335	23.10	0.204	3 W E.R.P.
12	699 ~ 716	23.61	0.230	2.00	25.61	0.364	23.46	0.222	30 W E.R.P.
13	777 ~ 787	23.65	0.232	1.88	25.53	0.357	23.38	0.218	30 W E.R.P.
14	788 ~ 798	22.98	0.199	1.88	24.86	0.306	22.71	0.187	30 W E.R.P.
26 part 90	814 ~ 824	23.56	0.227	1.26	24.82	0.303	22.67	0.185	100 W
26/5 part 22	824 ~ 849	23.55	0.226	1.26	24.81	0.303	22.66	0.185	7 W E.R.P.
66/4	1 710 ~ 1 780	23.24	0.211	-2.56	20.68	0.117			1 W E.I.R.P.
25/2	1 850 ~ 1 915	23.11	0.205	-1.13	21.98	0.158			2 W E.I.R.P.
7	2 500 ~ 2 570	23.14	0.206	2.32	25.46	0.352			2 W E.I.R.P.

ANT 2

Band	Frequency (MHz)	Maximum Conducted Power (dB m)	Maximum Conducted Power (W)	Antenna Gain (dB i)	Maximum E.I.R.P. (dB m)	Maximum E.I.R.P. (W)	Maximum E.R.P. (dB m)	Maximum E.R.P. (W)	Limit
71	663 ~ 698	23.25	0.211	3.40	26.65	0.462	24.50	0.282	3 W E.R.P.
12	699 ~ 716	23.61	0.230	3.40	27.01	0.502	24.86	0.306	30 W E.R.P.
13	777 ~ 787	23.65	0.232	0.59	24.24	0.265	22.09	0.162	30 W E.R.P.
14	788 ~ 798	22.98	0.199	0.59	23.57	0.228	21.42	0.139	30 W E.R.P.
26 part 90	814 ~ 824	23.56	0.227	0.50	24.06	0.255	21.91	0.155	100 W
26/5 part 22	824 ~ 849	23.55	0.226	1.08	24.63	0.290	22.48	0.177	7 W E.R.P.
66/4	1 710 ~ 1 780	23.24	0.211	-2.03	21.21	0.132			1 W E.I.R.P.
25/2	1 850 ~ 1 915	23.11	0.205	-1.01	22.10	0.162			2 W E.I.R.P.
7	2 500 ~ 2 570	23.14	0.206	1.46	24.60	0.288			2 W E.I.R.P.

Remark;

1. E.I.R.P. (dB m) = Maximum Conducted Power (dB m) + Antenna Gain (dB i)
2. E.R.P. (dB m) = E.I.R.P. (dB m) - 2.15 (dB); where E.R.P. and E.I.R.P. are expressed in consistent units.
3. Antenna gain reflecting cable loss was applied.

2.4.2. Spurious radiated emission

- Antenna 1

LTE band 7 (20 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (2 510.0 MHz)									
4 999.70	43.06	V	34.80	-35.26	42.60	-95.26	-52.66	-25	27.66
7 502.80	55.87	H	36.31	-32.96	59.22	-95.26	-36.04	-25	11.04
7 503.30	60.72	V	36.31	-32.96	64.07	-95.26	-31.19	-25	6.19
10 004.10	52.71	H	37.71	-31.91	58.51	-95.26	-36.75	-25	11.75
10 004.10	56.10	V	37.71	-31.91	61.90	-95.26	-33.36	-25	8.36
12 505.30	44.58	H	39.11	-28.54	55.15	-95.26	-40.11	-25	15.11
12 504.80	48.78	V	39.11	-28.55	59.34	-95.26	-35.92	-25	10.92
Above 12 600.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (2 535.0 MHz)									
4 999.70	43.21	V	34.80	-35.26	42.75	-95.26	-52.51	-25	27.51
5 051.70	45.40	H	34.70	-35.17	44.93	-95.26	-50.33	-25	25.33
5 051.70	48.86	V	34.70	-35.17	48.39	-95.26	-46.87	-25	21.87
7 577.80	52.53	H	36.56	-32.64	56.45	-95.26	-38.81	-25	13.81
7 577.80	60.25	V	36.56	-32.64	64.17	-95.26	-31.09	-25	6.09
10 103.90	53.93	H	37.79	-31.56	60.16	-95.26	-35.10	-25	10.10
10 103.90	59.79	V	37.79	-31.56	66.02	-95.26	-29.24	-25	4.24
12 630.00	46.61	H	39.36	-29.43	56.54	-95.26	-38.72	-25	13.72
12 630.50	51.74	V	39.36	-29.42	61.68	-95.26	-33.58	-25	8.58
Above 12 700.00	Not detected	-	-	-	-	-	-	-	-

LTE band 7 (20 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
High Channel (2 560.0 MHz)									
4 999.70	42.41	V	34.80	-35.26	41.95	-95.26	-53.31	-25	28.31
5 101.90	45.40	H	34.59	-35.42	44.57	-95.26	-50.69	-25	25.69
5 101.90	48.48	V	34.59	-35.42	47.65	-95.26	-47.61	-25	22.61
7 652.80	47.64	H	36.60	-32.40	51.84	-95.26	-43.42	-25	18.42
7 652.80	51.67	V	36.60	-32.40	55.87	-95.26	-39.39	-25	14.39
10 204.20	47.27	H	37.69	-31.56	53.40	-95.26	-41.86	-25	16.86
10 203.80	55.08	V	37.69	-31.56	61.21	-95.26	-34.05	-25	9.05
12 755.20	38.09	V	39.70	-27.58	50.21	-95.26	-45.05	-25	20.05
Above 12 800.00	Not detected	-	-	-	-	-	-	-	-

LTE band 12 (5 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (701.5 MHz)									
1 398.81	66.81	H	25.10	-39.15	52.76	-97.41	-44.65	-13	31.65
1 398.81	68.49	V	25.10	-39.15	54.44	-97.41	-42.98	-13	29.98
1 625.50	49.32	H	25.55	-38.61	36.26	-97.41	-61.15	-13	48.15
1 625.22	48.64	V	25.55	-38.61	35.58	-97.41	-61.83	-13	48.83
2 098.00	59.76	H	27.50	-37.35	49.91	-97.41	-47.50	-13	34.50
2 098.28	60.09	V	27.50	-37.35	50.24	-97.41	-47.17	-13	34.17
2 797.75	56.73	H	28.89	-36.77	48.85	-97.41	-48.56	-13	35.56
2 797.47	54.09	V	28.89	-36.77	46.21	-97.41	-51.20	-13	38.20
3 496.94	52.87	H	31.10	-36.68	47.29	-97.41	-50.12	-13	37.12
3 496.94	52.40	V	31.10	-36.68	46.82	-97.41	-50.59	-13	37.59
4 999.94	43.19	V	33.00	-35.26	40.93	-97.41	-56.48	-13	43.48
Above 5 000.00	Not detected	-	-	-	-	-	-	-	-

LTE band 12 (5 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Middle Channel (707.5 MHz)									
1 398.81	67.66	H	25.10	-39.15	53.61	-97.41	-43.80	-13	30.80
1 410.91	63.74	V	25.08	-39.15	49.67	-97.41	-47.74	-13	34.74
1 625.22	48.71	H	25.55	-38.61	35.65	-97.41	-61.76	-13	48.76
2 098.28	58.26	H	27.50	-37.35	48.41	-97.41	-49.00	-13	36.00
2 116.28	54.55	V	27.53	-37.14	44.94	-97.41	-52.47	-13	39.47
2 797.19	52.97	H	28.89	-36.77	45.09	-97.41	-52.32	-13	39.32
2 821.66	52.70	V	29.07	-36.76	45.01	-97.41	-52.40	-13	39.40
3 497.22	51.03	H	31.10	-36.68	45.45	-97.41	-51.96	-13	38.96
3 527.03	53.21	V	31.05	-36.84	47.42	-97.41	-49.99	-13	36.99
4 999.94	43.19	H	33.00	-35.26	40.93	-97.41	-56.48	-13	43.48
4 999.94	44.03	V	33.00	-35.26	41.77	-97.41	-55.64	-13	42.64
5 774.78	44.25	V	34.05	-33.64	44.66	-97.41	-52.75	-13	39.75
7 646.22	41.44	H	35.90	-32.44	44.90	-97.41	-52.51	-13	39.51
Above 7 700.00	Not detected	-	-	-	-	-	-	-	-
High Channel (713.5 MHz)									
1 423.00	60.43	H	25.05	-39.14	46.34	-97.41	-51.07	-13	38.07
1 423.00	61.35	V	25.05	-39.14	47.26	-97.41	-50.16	-13	37.16
1 624.94	48.57	H	25.55	-38.61	35.51	-97.41	-61.90	-13	48.90
1 625.50	48.64	V	25.55	-38.61	35.58	-97.41	-61.83	-13	48.83
2 134.28	56.01	H	27.57	-36.93	46.65	-97.41	-50.76	-13	37.76
2 134.56	52.18	V	27.57	-36.92	42.83	-97.41	-54.58	-13	41.58
2 845.56	50.53	H	29.26	-36.74	43.05	-97.41	-54.36	-13	41.36
2 845.56	51.05	V	29.26	-36.74	43.57	-97.41	-53.85	-13	40.85
3 557.13	47.81	H	31.04	-36.98	41.87	-97.41	-55.54	-13	42.54
3 556.56	50.36	V	31.04	-36.98	44.42	-97.41	-52.99	-13	39.99
4 575.53	42.52	H	31.85	-36.45	37.92	-97.41	-59.49	-13	46.49
4 917.25	44.18	V	32.93	-35.70	41.41	-97.41	-56.00	-13	43.00
4 999.94	43.74	V	33.00	-35.26	41.48	-97.41	-55.94	-13	42.94
Above 5 000.00	Not detected	-	-	-	-	-	-	-	-

LTE band 13 (5 MHz - QPSK)

Frequency (MHz)	Measured Level (dB μ V)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dB μ V/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (779.5 MHz)									
1 554.91	54.99	H	25.32	-38.80	41.51	-97.41	-55.90	-13	42.90
1 554.91	56.30	V	25.32	-38.80	42.82	-97.41	-54.59	-13	41.59
1 623.81	48.65	H	25.55	-38.61	35.59	-97.41	-61.82	-13	48.82
1 624.94	47.56	V	25.55	-38.61	34.50	-97.41	-62.91	-13	49.91
2 332.28	54.13	H	27.80	-36.45	45.48	-97.41	-51.94	-13	38.94
2 332.28	54.60	V	27.80	-36.45	45.95	-97.41	-51.46	-13	38.46
3 109.66	57.52	H	30.02	-36.65	50.89	-97.41	-46.53	-13	33.53
3 109.38	54.60	V	30.02	-36.65	47.97	-97.41	-49.44	-13	36.44
3 886.75	46.69	H	32.17	-36.07	42.79	-97.41	-54.62	-13	41.62
3 886.75	46.27	V	32.17	-36.07	42.37	-97.41	-55.04	-13	42.04
4 999.66	41.85	H	33.00	-35.26	39.59	-97.41	-57.82	-13	44.82
4 999.94	43.82	V	33.00	-35.26	41.56	-97.41	-55.85	-13	42.85
5 441.78	43.55	V	33.90	-34.36	43.09	-97.41	-54.32	-13	41.32
6 082.47	43.74	H	34.60	-33.31	45.03	-97.41	-52.38	-13	39.38
7 498.56	40.75	H	35.90	-32.97	43.68	-97.41	-53.73	-13	40.73
Above 7 500.00	Not detected	-	-	-	-	-	-	-	-

LTE band 13 (5 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. / E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Middle Channel (782.0 MHz)									
1 560.25	48.64	H	25.34	-38.77	35.21	-95.26	-60.05	-40	20.05
1 559.69	50.53	V	25.34	-38.78	37.09	-95.26	-58.17	-40	18.17
1 625.22	48.07	H	25.55	-38.61	35.01	-97.41	-62.40	-13	49.40
1 625.22	47.77	V	25.55	-38.61	34.71	-97.41	-62.70	-13	49.70
2 144.69	48.14	V	27.59	-36.81	38.92	-97.41	-58.49	-13	45.49
2 300.50	50.39	V	27.80	-36.35	41.84	-97.41	-55.57	-13	42.57
2 339.88	53.15	H	27.80	-36.39	44.56	-97.41	-52.85	-13	39.85
2 339.59	51.04	V	27.80	-36.39	42.45	-97.41	-54.96	-13	41.96
2 400.63	50.19	H	28.10	-36.23	42.06	-97.41	-55.35	-13	42.35
3 119.78	51.85	H	30.04	-36.65	45.24	-97.41	-52.18	-13	39.18
3 119.78	50.20	V	30.04	-36.65	43.59	-97.41	-53.82	-13	40.82
4 999.94	42.18	H	33.00	-35.26	39.92	-97.41	-57.49	-13	44.49
5 000.22	44.01	V	33.00	-35.26	41.75	-97.41	-55.66	-13	42.66
Above 5 100.00	Not detected	-	-	-	-	-	-	-	-

LTE band 13 (5 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. / E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
High Channel (784.5 MHz)									
1 565.06	53.62	H	25.36	-38.75	40.23	-95.26	-55.03	-40	15.03
1 565.03	51.95	V	25.36	-38.75	38.56	-95.26	-56.70	-40	16.70
1 625.22	48.10	H	25.55	-38.61	35.04	-97.41	-62.37	-13	49.37
1 625.22	47.79	V	25.55	-38.61	34.73	-97.41	-62.68	-13	49.68
2 347.19	54.03	H	27.80	-36.32	45.51	-97.41	-51.90	-13	38.90
2 347.19	53.71	V	27.80	-36.32	45.19	-97.41	-52.22	-13	39.22
3 129.63	52.68	H	30.06	-36.65	46.09	-97.41	-51.32	-13	38.32
3 129.63	54.23	V	30.06	-36.65	47.64	-97.41	-49.77	-13	36.77
3 912.06	44.52	H	32.18	-35.97	40.73	-97.41	-56.69	-13	43.69
3 911.78	44.54	V	32.18	-35.97	40.75	-97.41	-56.66	-13	43.66
5 000.22	42.68	H	33.00	-35.26	40.42	-97.41	-56.99	-13	43.99
4 999.94	44.50	V	33.00	-35.26	42.24	-97.41	-55.18	-13	42.18
Above 5 100.00	Not detected	-	-	-	-	-	-	-	-

LTE band 14 (10 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. / E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Middle Channel (793.0 MHz)									
1 577.41	52.65	H	25.41	-38.70	39.36	-95.26	-55.90	-40	15.90
1 577.41	51.29	V	25.41	-38.70	38.00	-95.26	-57.26	-40	17.26
2 366.03	53.57	H	27.90	-36.22	45.25	-97.41	-52.16	-13	39.16
2 365.75	52.64	V	27.89	-36.22	44.31	-97.41	-53.10	-13	40.10
3 154.38	52.33	H	30.11	-36.66	45.78	-97.41	-51.63	-13	38.63
3 154.38	50.40	V	30.11	-36.66	43.85	-97.41	-53.56	-13	40.56
3 943.00	44.52	H	32.11	-35.91	40.72	-97.41	-56.69	-13	43.69
4 926.25	43.32	H	32.95	-35.72	40.55	-97.41	-56.87	-13	43.87
4 999.94	44.30	V	33.00	-35.26	42.04	-97.41	-55.37	-13	42.37
5 573.69	43.07	H	33.90	-34.04	42.93	-97.41	-54.48	-13	41.48
Above 5 600.00	Not detected	-	-	-	-	-	-	-	-

LTE band 25/2 (15 MHz - QPSK)

Frequency (MHz)	Measured Level (dB μ V)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dB μ V/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 857.5 MHz)									
3 701.70	57.62	H	32.91	-36.60	53.93	-95.26	-41.33	-13	28.33
3 701.30	63.95	V	32.91	-36.60	60.26	-95.26	-35.00	-13	22.00
4 999.70	43.05	V	34.80	-35.26	42.59	-95.26	-52.67	-13	39.67
5 552.30	54.36	H	35.00	-34.20	55.16	-95.26	-40.10	-13	27.10
5 552.30	61.55	V	35.00	-34.20	62.35	-95.26	-32.91	-13	19.91
7 403.00	56.23	H	36.11	-32.16	60.18	-95.26	-35.08	-13	22.08
7 403.00	60.01	V	36.11	-32.16	63.96	-95.26	-31.30	-13	18.30
9 254.10	57.79	H	37.51	-32.67	62.63	-95.26	-32.63	-13	19.63
9 254.10	62.95	V	37.51	-32.67	67.79	-95.26	-27.47	-13	14.47
11 104.70	46.74	H	38.00	-30.16	54.58	-95.26	-40.68	-13	27.68
11 104.70	50.17	V	38.00	-30.16	58.01	-95.26	-37.25	-13	24.25
12 955.30	35.75	H	39.81	-29.08	46.48	-95.26	-48.78	-13	35.78
12 955.30	41.56	V	39.81	-29.08	52.29	-95.26	-42.97	-13	29.97
14 806.90	37.21	V	41.30	-23.52	54.99	-95.26	-40.27	-13	27.27
Above 14 900.00	Not detected	-	-	-	-	-	-	-	-

LTE band 25/2 (15 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Middle Channel (1 882.5 MHz)									
3 751.40	60.34	H	33.11	-36.86	56.59	-95.26	-38.67	-13	25.67
3 751.40	59.75	V	33.11	-36.86	56.00	-95.26	-39.26	-13	26.26
4 999.70	44.18	V	34.80	-35.26	43.72	-95.26	-51.54	-13	38.54
5 627.30	52.03	H	34.85	-33.52	53.36	-95.26	-41.90	-13	28.90
5 627.30	57.80	V	34.85	-33.52	59.13	-95.26	-36.13	-13	23.13
7 503.30	62.11	H	36.31	-32.96	65.46	-95.26	-29.80	-13	16.80
7 503.30	65.46	V	36.31	-32.96	68.81	-95.26	-26.45	-13	13.45
9 378.80	59.38	H	37.66	-32.42	64.62	-95.26	-30.64	-13	17.64
9 379.20	64.59	V	37.66	-32.41	69.84	-95.26	-25.42	-13	12.42
11 254.70	44.05	H	38.00	-29.88	52.17	-95.26	-43.09	-13	30.09
11 254.70	46.22	V	38.00	-29.88	54.34	-95.26	-40.92	-13	27.92
13 130.60	39.77	H	39.96	-28.20	51.53	-95.26	-43.73	-13	30.73
13 130.60	43.05	V	39.96	-28.20	54.81	-95.26	-40.45	-13	27.45
15 006.10	37.73	V	41.30	-26.58	52.45	-95.26	-42.81	-13	29.81
Above 15 100.00	Not detected	-	-	-	-	-	-	-	-

LTE band 25/2 (15 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
High Channel (1 907.5 MHz)									
3 801.60	62.08	H	33.30	-36.63	58.75	-95.26	-36.51	-13	23.51
3 801.60	60.16	V	33.30	-36.63	56.83	-95.26	-38.43	-13	25.43
4 999.20	42.81	V	34.80	-35.26	42.35	-95.26	-52.91	-13	39.91
5 702.30	56.06	H	34.70	-33.56	57.20	-95.26	-38.06	-13	25.06
5 702.30	63.22	V	34.70	-33.56	64.36	-95.26	-30.90	-13	17.90
7 603.10	56.95	H	36.60	-32.62	60.93	-95.26	-34.33	-13	21.33
7 603.10	62.72	V	36.60	-32.62	66.70	-95.26	-28.56	-13	15.56
9 503.40	58.25	H	37.59	-32.45	63.39	-95.26	-31.87	-13	18.87
9 503.90	59.39	V	37.59	-32.45	64.53	-95.26	-30.73	-13	17.73
11 404.70	42.46	H	38.20	-29.93	50.73	-95.26	-44.53	-13	31.53
11 404.70	48.19	V	38.20	-29.93	56.46	-95.26	-38.80	-13	25.80
13 305.50	41.33	H	40.21	-27.82	53.72	-95.26	-41.54	-13	28.54
13 305.50	44.84	V	40.21	-27.82	57.23	-95.26	-38.03	-13	25.03
15 206.30	37.11	V	41.30	-24.22	54.19	-95.26	-41.07	-13	28.07
Above 15 300.00	Not detected	-	-	-	-	-	-	-	-

LTE band 26/5 Part 22 (10 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (829.0 MHz)									
1 649.41	58.82	H	25.60	-38.68	45.74	-97.41	-51.67	-13	38.67
1 649.41	58.22	V	25.60	-38.68	45.14	-97.41	-52.27	-13	39.27
2 474.03	57.65	H	28.15	-36.83	48.97	-97.41	-48.44	-13	35.44
2 474.03	58.83	V	28.15	-36.83	50.15	-97.41	-47.26	-13	34.26
3 298.66	61.38	H	30.69	-37.10	54.97	-97.41	-42.44	-13	29.44
3 298.66	60.62	V	30.69	-37.10	54.21	-97.41	-43.20	-13	30.20
4 123.28	48.85	H	31.95	-36.22	44.58	-97.41	-52.83	-13	39.83
4 123.00	49.62	V	31.95	-36.22	45.35	-97.41	-52.06	-13	39.06
4 999.94	45.12	V	33.00	-35.26	42.86	-97.41	-54.55	-13	41.55
7 373.97	42.51	V	36.05	-32.19	46.37	-97.41	-51.04	-13	38.04
Above 7 400.00	Not detected	-	-	-	-	-	-	-	-

LTE band 26/5 Part 22 (10 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Middle Channel (836.5 MHz)									
1 664.31	61.95	H	25.77	-38.67	49.05	-97.41	-48.36	-13	35.36
1 664.59	63.90	V	25.78	-38.67	51.01	-97.41	-46.40	-13	33.40
2 496.53	60.88	H	28.11	-37.16	51.83	-97.41	-45.58	-13	32.58
2 496.53	58.59	V	28.11	-37.16	49.54	-97.41	-47.87	-13	34.87
3 328.47	63.60	H	30.64	-37.03	57.21	-97.41	-40.20	-13	27.20
3 328.47	61.57	V	30.64	-37.03	55.18	-97.41	-42.23	-13	29.23
4 160.69	47.45	H	31.98	-36.16	43.27	-97.41	-54.14	-13	41.14
4 160.69	49.53	V	31.98	-36.16	45.35	-97.41	-52.06	-13	39.06
5 000.22	43.06	H	33.00	-35.26	40.80	-97.41	-56.61	-13	43.61
4 999.94	44.05	V	33.00	-35.26	41.79	-97.41	-55.62	-13	42.62
7 489.00	41.61	V	35.92	-32.92	44.61	-97.41	-52.80	-13	39.80
8 321.22	40.85	V	36.40	-33.95	43.30	-97.41	-54.11	-13	41.11
Above 8 400.00	Not detected	-	-	-	-	-	-	-	-
High Channel (844.0 MHz)									
1 625.22	48.18	H	25.55	-38.61	35.12	-97.41	-62.29	-13	49.29
1 679.50	59.45	V	25.95	-38.68	46.72	-97.41	-50.69	-13	37.69
2 519.03	57.48	H	28.21	-36.94	48.75	-97.41	-48.66	-13	35.66
2 519.03	55.74	V	28.21	-36.94	47.01	-97.41	-50.40	-13	37.40
3 358.56	57.42	H	30.62	-36.97	51.07	-97.41	-46.34	-13	33.34
3 358.56	57.92	V	30.62	-36.97	51.57	-97.41	-45.84	-13	32.84
4 999.94	44.86	V	33.00	-35.26	42.60	-97.41	-54.81	-13	41.81
5 547.53	43.23	V	33.90	-34.24	42.89	-97.41	-54.52	-13	41.52
Above 5 600.00	Not detected	-	-	-	-	-	-	-	-

LTE band 26 Part 90 (10 MHz - QPSK)

Frequency (MHz)	Measured Level (dB μ V)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dB μ V/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Middle Channel (819.0 MHz)									
1 629.16	55.30	H	25.56	-38.62	42.24	-97.41	-55.17	-13	42.17
1 629.44	56.97	V	25.56	-38.62	43.91	-97.41	-53.51	-13	40.51
2 443.94	51.95	H	28.19	-36.32	43.82	-97.41	-53.59	-13	40.59
2 444.22	52.57	V	28.19	-36.32	44.44	-97.41	-52.98	-13	39.98
3 258.44	56.74	H	30.45	-37.07	50.12	-97.41	-47.29	-13	34.29
3 258.72	56.43	V	30.45	-37.07	49.81	-97.41	-47.60	-13	34.60
4 072.94	49.18	H	31.90	-36.37	44.71	-97.41	-52.70	-13	39.70
4 073.22	51.06	V	31.90	-36.37	46.59	-97.41	-50.82	-13	37.82
4 999.94	44.59	V	33.00	-35.26	42.33	-97.41	-55.09	-13	42.09
Above 5 000.00	Not detected	-	-	-	-	-	-	-	-

LTE band 66/4 (15 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 717.5 MHz)									
3 421.40	59.92	H	32.19	-36.93	55.18	-95.26	-40.08	-13	27.08
3 421.40	60.60	V	32.19	-36.93	55.86	-95.26	-39.40	-13	26.40
4 999.70	42.91	V	34.80	-35.26	42.45	-95.26	-52.81	-13	39.81
5 132.30	58.27	H	34.47	-35.45	57.29	-95.26	-37.97	-13	24.97
5 131.90	60.67	V	34.47	-35.45	59.69	-95.26	-35.57	-13	22.57
6 843.30	48.58	H	35.70	-33.86	50.42	-95.26	-44.84	-13	31.84
6 842.80	54.96	V	35.70	-33.86	56.80	-95.26	-38.46	-13	25.46
8 553.80	61.56	H	36.91	-33.54	64.93	-95.26	-30.33	-13	17.33
8 553.80	67.78	V	36.91	-33.54	71.15	-95.26	-24.11	-13	11.11
10 264.70	47.57	H	37.60	-31.27	53.90	-95.26	-41.36	-13	28.36
10 264.70	54.71	V	37.60	-31.27	61.04	-95.26	-34.22	-13	21.22
13 686.60	40.98	V	40.85	-27.87	53.96	-95.26	-41.30	-13	28.30
Above 13 700.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (1 745.0 MHz)									
3 476.30	59.99	H	32.35	-36.78	55.56	-95.26	-39.70	-13	26.70
3 475.80	55.92	V	32.35	-36.79	51.48	-95.26	-43.78	-13	30.78
4 999.70	43.55	V	34.80	-35.26	43.09	-95.26	-52.17	-13	39.17
5 214.40	55.20	H	34.30	-35.13	54.37	-95.26	-40.89	-13	27.89
5 214.80	61.64	V	34.30	-35.13	60.81	-95.26	-34.45	-13	21.45
6 953.00	48.96	H	35.91	-33.18	51.69	-95.26	-43.57	-13	30.57
6 953.00	57.97	V	35.91	-33.18	60.70	-95.26	-34.56	-13	21.56
8 691.60	59.34	H	37.18	-34.29	62.23	-95.26	-33.03	-13	20.03
8 691.60	73.11	V	37.18	-34.29	76.00	-95.26	-19.26	-13	6.26
10 429.70	48.04	H	37.70	-31.14	54.60	-95.26	-40.66	-13	27.66
10 429.70	54.50	V	37.70	-31.14	61.06	-95.26	-34.20	-13	21.20
13 906.40	38.75	V	41.10	-25.68	54.17	-95.26	-41.09	-13	28.09
15 645.00	38.32	V	41.50	-26.18	53.64	-95.26	-41.62	-13	28.62
Above 15 700.00	Not detected	-	-	-	-	-	-	-	-

LTE band 66/4 (15 MHz - QPSK)

Frequency (MHz)	Measured Level (dB μ V)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dB μ V/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
High Channel (1 772.5 MHz)									
3 531.10	59.70	H	32.40	-36.88	55.22	-95.26	-40.04	-13	27.04
3 531.10	63.57	V	32.40	-36.88	59.09	-95.26	-36.17	-13	23.17
4 999.70	42.85	V	34.80	-35.26	42.39	-95.26	-52.87	-13	39.87
5 297.30	53.34	H	34.39	-34.80	52.93	-95.26	-42.33	-13	29.33
5 297.30	60.15	V	34.39	-34.80	59.74	-95.26	-35.52	-13	22.52
7 063.10	56.17	H	36.10	-33.09	59.18	-95.26	-36.08	-13	23.08
7 063.10	61.14	V	36.10	-33.09	64.15	-95.26	-31.11	-13	18.11
8 828.90	62.31	H	37.40	-32.94	66.77	-95.26	-28.49	-13	15.49
8 828.90	72.86	V	37.40	-32.94	77.32	-95.26	-17.94	-13	4.94
10 594.70	50.99	H	37.70	-30.78	57.91	-95.26	-37.35	-13	24.35
10 595.20	52.19	V	37.70	-30.78	59.11	-95.26	-36.15	-13	23.15
12 360.50	37.70	H	38.92	-28.87	47.75	-95.26	-47.51	-13	34.51
12 360.50	38.05	V	38.92	-28.87	48.10	-95.26	-47.16	-13	34.16
14 126.70	35.50	H	41.20	-27.93	48.77	-95.26	-46.49	-13	33.49
14 126.70	36.86	V	41.20	-27.93	50.13	-95.26	-45.13	-13	32.13
Above 14 200.00	Not detected	—	—	—	—	—	—	—	—

LTE band 71 (15 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (670.5 MHz)									
1 327.94	68.45	H	25.10	-39.28	54.27	-97.41	-43.14	-13	30.14
1 327.94	71.47	V	25.10	-39.28	57.29	-97.41	-40.12	-13	27.12
1 625.22	48.99	H	25.55	-38.61	35.93	-97.41	-61.48	-13	48.48
1 625.78	48.63	V	25.55	-38.61	35.57	-97.41	-61.84	-13	48.84
1 991.97	47.96	H	27.67	-37.68	37.95	-97.41	-59.46	-13	46.46
1 991.97	52.34	V	27.67	-37.68	42.33	-97.41	-55.08	-13	42.08
2 655.72	50.10	H	28.69	-36.77	42.02	-97.41	-55.39	-13	42.39
2 655.72	50.37	V	28.69	-36.77	42.29	-97.41	-55.12	-13	42.12
3 319.47	48.63	H	30.66	-37.05	42.24	-97.41	-55.17	-13	42.17
3 319.47	46.78	V	30.66	-37.05	40.39	-97.41	-57.02	-13	44.02
5 000.22	44.03	V	33.00	-35.26	41.77	-97.41	-55.64	-13	42.64
5 323.94	47.85	V	33.85	-34.68	47.02	-97.41	-50.39	-13	37.39
Above 5 400.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (680.5 MHz)									
1 347.91	66.72	H	25.10	-39.37	52.45	-97.41	-44.96	-13	31.96
1 347.47	70.26	V	25.10	-39.37	55.99	-97.41	-41.42	-13	28.42
2 695.66	51.48	H	28.61	-36.92	43.17	-97.41	-54.24	-13	41.24
2 695.38	51.60	V	28.61	-36.92	43.29	-97.41	-54.13	-13	41.13
3 369.25	47.17	H	30.64	-36.96	40.85	-97.41	-56.56	-13	43.56
3 369.53	48.95	V	30.64	-36.96	42.63	-97.41	-54.78	-13	41.78
5 000.22	43.98	V	33.00	-35.26	41.72	-97.41	-55.69	-13	42.69
7 584.91	40.64	H	35.90	-32.64	43.90	-97.41	-53.51	-13	40.51
8 963.31	40.54	H	37.07	-33.06	44.55	-97.41	-52.86	-13	39.86
Above 9 000.00	Not detected	-	-	-	-	-	-	-	-

LTE band 71 (15 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
High Channel (690.5 MHz)									
1 367.88	72.22	H	25.10	-39.23	58.09	-97.41	-39.32	-13	26.32
1 367.88	76.08	V	25.10	-39.23	61.95	-97.41	-35.47	-13	22.47
2 051.88	54.83	H	27.60	-37.56	44.87	-97.41	-52.54	-13	39.54
2 051.88	57.30	V	27.60	-37.56	47.34	-97.41	-50.07	-13	37.07
2 735.59	55.76	H	28.67	-36.87	47.56	-97.41	-49.85	-13	36.85
2 735.59	62.20	V	28.67	-36.87	54.00	-97.41	-43.41	-13	30.41
3 419.31	51.47	H	30.85	-36.94	45.38	-97.41	-52.03	-13	39.03
3 419.59	51.27	V	30.86	-36.94	45.19	-97.41	-52.22	-13	39.22
4 874.50	42.74	H	32.85	-35.67	39.92	-97.41	-57.49	-13	44.49
5 000.22	44.72	V	33.00	-35.26	42.46	-97.41	-54.95	-13	41.95
Above 5 100.00	Not detected	-	-	-	-	-	-	-	-

- Antenna 2

LTE band 7 (20 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (2 510.0 MHz)									
5 002.00	42.71	H	34.80	-35.26	42.25	-95.26	-53.01	-25	28.01
5 002.00	43.68	V	34.80	-35.26	43.22	-95.26	-52.04	-25	27.04
5 036.30	44.95	V	34.73	-35.23	44.45	-95.26	-50.81	-25	25.81
6 817.00	40.08	V	35.70	-33.78	42.00	-95.26	-53.26	-25	28.26
7 502.80	46.60	H	36.31	-32.96	49.95	-95.26	-45.31	-25	20.31
7 502.80	49.14	V	36.31	-32.96	52.49	-95.26	-42.77	-25	17.77
8 106.10	39.01	H	36.80	-33.91	41.90	-95.26	-53.36	-25	28.36
10 004.10	40.90	H	37.71	-31.91	46.70	-95.26	-48.56	-25	23.56
10 004.10	43.65	V	37.71	-31.91	49.45	-95.26	-45.81	-25	20.81
10 072.50	45.55	V	37.80	-31.53	51.82	-95.26	-43.44	-25	18.44
Above 10 100.00	Not detected	-	-	-	-	-	-	-	-

LTE band 7 (20 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Middle Channel (2 535.0 MHz)									
4 999.70	43.11	V	34.80	-35.26	42.65	-95.26	-52.61	-25	27.61
5 051.70	43.49	H	34.70	-35.17	43.02	-95.26	-52.24	-25	27.24
5 051.70	46.87	V	34.70	-35.17	46.40	-95.26	-48.86	-25	23.86
7 577.80	48.29	H	36.56	-32.64	52.21	-95.26	-43.05	-25	18.05
7 577.80	50.54	V	36.56	-32.64	54.46	-95.26	-40.80	-25	15.80
10 103.90	42.27	H	37.79	-31.56	48.50	-95.26	-46.76	-25	21.76
10 103.90	48.04	V	37.79	-31.56	54.27	-95.26	-40.99	-25	15.99
12 630.00	36.70	H	39.36	-29.43	46.63	-95.26	-48.63	-25	23.63
12 630.00	36.44	V	39.36	-29.43	46.37	-95.26	-48.89	-25	23.89
Above 12 700.00	Not detected	—	—	—	—	—	—	—	—
High Channel (2 560.0 MHz)									
4 999.70	43.09	V	34.80	-35.26	42.63	-95.26	-52.63	-25	27.63
5 101.90	44.12	H	34.59	-35.42	43.29	-95.26	-51.97	-25	26.97
5 101.90	47.21	V	34.59	-35.42	46.38	-95.26	-48.88	-25	23.88
7 652.80	41.29	H	36.60	-32.40	45.49	-95.26	-49.77	-25	24.77
7 653.30	45.60	V	36.60	-32.40	49.80	-95.26	-45.46	-25	20.46
10 204.20	38.78	H	37.69	-31.56	44.91	-95.26	-50.35	-25	25.35
10 204.20	39.99	V	37.69	-31.56	46.12	-95.26	-49.14	-25	24.14
Above 10 300.00	Not detected	—	—	—	—	—	—	—	—

LTE band 12 (5 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (701.5 MHz)									
1 398.81	64.20	H	25.10	-39.15	50.15	-97.41	-47.26	-13	34.26
1 398.81	65.07	V	25.10	-39.15	51.02	-97.41	-46.39	-13	33.39
1 624.94	48.01	H	26.60	-38.61	36.00	-97.41	-61.41	-13	48.41
2 797.47	51.81	H	29.90	-36.77	44.94	-97.41	-52.47	-13	39.47
2 797.75	50.60	V	29.90	-36.77	43.73	-97.41	-53.68	-13	40.68
3 081.25	46.17	V	31.69	-36.76	41.10	-97.41	-56.31	-13	43.31
3 496.94	44.52	V	32.39	-36.68	40.23	-97.41	-57.18	-13	44.18
Above 3 500.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (707.5 MHz)									
1 410.91	62.49	H	25.23	-39.15	48.57	-97.41	-48.84	-13	35.84
1 410.91	66.24	V	25.23	-39.15	52.32	-97.41	-45.09	-13	32.09
1 624.94	48.02	H	26.60	-38.61	36.01	-97.41	-61.40	-13	48.40
2 821.66	49.67	H	29.90	-36.76	42.81	-97.41	-54.60	-13	41.60
2 821.38	52.50	V	29.90	-36.76	45.64	-97.41	-51.77	-13	38.77
3 125.13	45.48	V	31.90	-36.65	40.73	-97.41	-56.68	-13	43.68
3 526.75	44.74	V	32.40	-36.84	40.30	-97.41	-57.11	-13	44.11
Above 3 600.00	Not detected	-	-	-	-	-	-	-	-
High Channel (713.5 MHz)									
1 423.00	43.75	H	25.38	-39.14	29.99	-97.41	-67.42	-13	54.42
1 422.72	66.14	V	25.37	-39.14	52.37	-97.41	-45.04	-13	32.04
1 625.78	48.13	H	26.60	-38.61	36.12	-97.41	-61.29	-13	48.29
2 845.56	49.84	V	29.90	-36.74	43.00	-97.41	-54.41	-13	41.41
3 556.84	47.41	V	32.41	-36.98	42.84	-97.41	-54.57	-13	41.57
4 999.94	43.61	V	34.80	-35.26	43.15	-97.41	-54.26	-13	41.26
Above 5 000.00	Not detected	-	-	-	-	-	-	-	-

LTE band 13 (5 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. / E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (779.5 MHz)									
1 554.91	61.61	H	26.42	-38.80	49.23	-97.41	-48.18	-13	35.18
1 554.91	54.32	V	26.42	-38.80	41.94	-97.41	-55.47	-13	42.47
1 624.94	48.30	H	26.60	-38.61	36.29	-97.41	-61.12	-13	48.12
1 625.50	48.78	V	26.60	-38.61	36.77	-97.41	-60.64	-13	47.64
2 085.63	54.68	V	28.40	-37.44	45.64	-97.41	-51.77	-13	38.77
2 125.28	47.82	V	28.40	-37.03	39.19	-97.41	-58.22	-13	45.22
2 332.28	62.93	H	28.96	-36.45	55.44	-97.41	-41.97	-13	28.97
2 332.28	61.24	V	28.96	-36.45	53.75	-97.41	-43.66	-13	30.66
2 574.44	53.40	V	29.85	-36.60	46.65	-97.41	-50.76	-13	37.76
2 727.44	55.59	H	29.90	-36.86	48.63	-97.41	-48.78	-13	35.78
3 109.66	61.40	H	31.84	-36.65	56.59	-97.41	-40.82	-13	27.82
3 109.38	62.16	V	31.84	-36.65	57.35	-97.41	-40.06	-13	27.06
3 887.03	44.87	H	33.40	-36.07	42.20	-97.41	-55.21	-13	42.21
3 887.03	47.40	V	33.40	-36.07	44.73	-97.41	-52.68	-13	39.68
4 999.94	43.41	V	34.80	-35.26	42.95	-97.41	-54.46	-13	41.46
Above 5 000.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (782.0 MHz)									
1 559.69	50.50	H	26.44	-38.78	38.16	-95.26	-57.10	-40	17.10
1 559.69	52.20	V	26.44	-38.78	39.86	-95.26	-55.40	-40	15.40
1 625.50	48.55	H	26.60	-38.61	36.54	-97.41	-60.87	-13	47.87
2 339.88	55.79	H	29.02	-36.39	48.42	-97.41	-48.99	-13	35.99
2 339.88	55.06	V	29.02	-36.39	47.69	-97.41	-49.72	-13	36.72
2 394.44	52.81	H	29.01	-36.22	45.60	-97.41	-51.81	-13	38.81
2 435.50	49.96	H	29.07	-36.33	42.70	-97.41	-54.71	-13	41.71
3 119.50	52.15	H	31.88	-36.65	47.38	-97.41	-50.03	-13	37.03
3 119.50	56.71	V	31.88	-36.65	51.94	-97.41	-45.47	-13	32.47
3 480.06	45.86	H	32.36	-36.76	41.46	-97.41	-55.95	-13	42.95
3 899.41	42.38	V	33.40	-36.02	39.76	-97.41	-57.65	-13	44.65
4 999.66	42.84	V	34.80	-35.26	42.38	-97.41	-55.03	-13	42.03
Above 5 000.00	Not detected	-	-	-	-	-	-	-	-

LTE band 13 (5 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. / E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
High Channel (784.5 MHz)									
1 565.03	55.11	H	26.46	-38.75	42.82	-95.26	-52.44	-40	12.44
1 565.03	59.02	V	26.46	-38.75	46.73	-95.26	-48.53	-40	8.53
1 625.50	47.98	H	26.60	-38.61	35.97	-97.41	-61.44	-13	48.44
1 626.06	47.57	V	26.60	-38.61	35.56	-97.41	-61.85	-13	48.85
2 347.19	60.59	H	29.08	-36.32	53.35	-97.41	-44.06	-13	31.06
2 347.19	59.94	V	29.08	-36.32	52.70	-97.41	-44.71	-13	31.71
3 129.63	55.85	H	31.92	-36.65	51.12	-97.41	-46.29	-13	33.29
3 129.63	60.28	V	31.92	-36.65	55.55	-97.41	-41.86	-13	28.86
3 911.78	42.45	H	33.40	-35.97	39.88	-97.41	-57.53	-13	44.53
3 912.06	46.00	V	33.40	-35.97	43.43	-97.41	-53.98	-13	40.98
4 619.69	42.04	V	33.90	-36.38	39.56	-97.41	-57.85	-13	44.85
4 999.94	45.92	V	34.80	-35.26	45.46	-97.41	-51.95	-13	38.95
Above 5 000.00	Not detected	-	-	-	-	-	-	-	-

LTE band 14 (10 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. / E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Middle Channel (793.0 MHz)									
1 577.41	58.88	H	26.51	-38.70	46.69	-95.26	-48.57	-40	8.57
1 577.41	64.15	V	26.51	-38.70	51.96	-95.26	-43.30	-40	3.30
2 125.28	47.21	V	28.40	-37.03	38.58	-97.41	-58.83	-13	45.83
2 366.03	58.93	H	29.07	-36.22	51.78	-97.41	-45.63	-13	32.63
2 366.03	57.80	V	29.07	-36.22	50.65	-97.41	-46.76	-13	33.76
3 154.38	50.58	H	32.01	-36.66	45.93	-97.41	-51.48	-13	38.48
3 154.66	53.17	V	32.01	-36.66	48.52	-97.41	-48.89	-13	35.89
3 497.22	45.28	V	32.39	-36.68	40.99	-97.41	-56.42	-13	43.42
5 000.22	42.66	V	34.80	-35.26	42.20	-97.41	-55.21	-13	42.21
Above 5 100.00	Not detected	-	-	-	-	-	-	-	-

LTE band 25/2 (15 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 857.5 MHz)									
3 701.30	54.49	H	32.91	-36.60	50.80	-95.26	-44.46	-13	31.46
3 701.30	55.08	V	32.91	-36.60	51.39	-95.26	-43.87	-13	30.87
4 350.90	41.83	V	34.40	-35.85	40.38	-95.26	-54.88	-13	41.88
4 999.70	42.34	V	34.80	-35.26	41.88	-95.26	-53.38	-13	40.38
5 552.30	53.68	H	35.00	-34.20	54.48	-95.26	-40.78	-13	27.78
5 552.30	55.97	V	35.00	-34.20	56.77	-95.26	-38.49	-13	25.49
7 403.00	51.54	H	36.11	-32.16	55.49	-95.26	-39.77	-13	26.77
7 403.00	55.15	V	36.11	-32.16	59.10	-95.26	-36.16	-13	23.16
9 254.10	65.82	H	37.51	-32.67	70.66	-95.26	-24.60	-13	11.60
9 254.10	66.72	V	37.51	-32.67	71.56	-95.26	-23.70	-13	10.70
11 104.70	39.48	H	38.00	-30.16	47.32	-95.26	-47.94	-13	34.94
11 104.20	42.53	V	38.00	-30.16	50.37	-95.26	-44.89	-13	31.89
12 955.30	35.73	V	39.81	-29.08	46.46	-95.26	-48.80	-13	35.80
Above 13 000.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (1 882.5 MHz)									
3 751.40	53.72	H	33.11	-36.86	49.97	-95.26	-45.29	-13	32.29
3 751.40	56.82	V	33.11	-36.86	53.07	-95.26	-42.19	-13	29.19
4 999.70	43.61	V	34.80	-35.26	43.15	-95.26	-52.11	-13	39.11
5 463.80	41.73	H	35.00	-34.27	42.46	-95.26	-52.80	-13	39.80
5 627.30	52.00	H	34.85	-33.52	53.33	-95.26	-41.93	-13	28.93
5 627.30	58.63	V	34.85	-33.52	59.96	-95.26	-35.30	-13	22.30
7 502.80	54.40	H	36.31	-32.96	57.75	-95.26	-37.51	-13	24.51
7 503.30	56.89	V	36.31	-32.96	60.24	-95.26	-35.02	-13	22.02
9 378.80	59.56	H	37.66	-32.42	64.80	-95.26	-30.46	-13	17.46
9 378.80	59.34	V	37.66	-32.42	64.58	-95.26	-30.68	-13	17.68
11 254.70	41.90	H	38.00	-29.88	50.02	-95.26	-45.24	-13	32.24
11 254.70	43.56	V	38.00	-29.88	51.68	-95.26	-43.58	-13	30.58
13 130.20	36.23	H	39.96	-28.21	47.98	-95.26	-47.28	-13	34.28
13 130.60	39.98	V	39.96	-28.20	51.74	-95.26	-43.52	-13	30.52
Above 13 200.00	Not detected	-	-	-	-	-	-	-	-

LTE band 25/2 (15 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
High Channel (1 907.5 MHz)									
3 801.60	55.89	H	33.30	-36.63	52.56	-95.26	-42.70	-13	29.70
3 801.10	56.97	V	33.30	-36.64	53.63	-95.26	-41.63	-13	28.63
4 999.70	43.97	V	34.80	-35.26	43.51	-95.26	-51.75	-13	38.75
5 702.30	56.80	H	34.70	-33.56	57.94	-95.26	-37.32	-13	24.32
5 702.30	63.20	V	34.70	-33.56	64.34	-95.26	-30.92	-13	17.92
7 603.10	52.73	H	36.60	-32.62	56.71	-95.26	-38.55	-13	25.55
7 603.10	55.21	V	36.60	-32.62	59.19	-95.26	-36.07	-13	23.07
9 503.90	62.07	H	37.59	-32.45	67.21	-95.26	-28.05	-13	15.05
9 503.90	61.09	V	37.59	-32.45	66.23	-95.26	-29.03	-13	16.03
11 404.70	40.25	H	38.20	-29.93	48.52	-95.26	-46.74	-13	33.74
11 404.70	40.10	V	38.20	-29.93	48.37	-95.26	-46.89	-13	33.89
13 305.50	40.53	H	40.21	-27.82	52.92	-95.26	-42.34	-13	29.34
13 305.50	44.31	V	40.21	-27.82	56.70	-95.26	-38.56	-13	25.56
Above 13 400.00	Not detected	-	-	-	-	-	-	-	-

LTE band 26/5 Part 22 (10 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (829.0 MHz)									
1 649.41	54.58	H	26.60	-38.68	42.50	-97.41	-54.91	-13	41.91
1 649.41	54.61	V	26.60	-38.68	42.53	-97.41	-54.88	-13	41.88
2 125.56	46.80	V	28.40	-37.02	38.18	-97.41	-59.23	-13	46.23
2 474.31	52.73	H	29.29	-36.84	45.18	-97.41	-52.23	-13	39.23
2 474.03	56.66	V	29.29	-36.83	49.12	-97.41	-48.29	-13	35.29
3 298.66	48.60	H	32.20	-37.10	43.70	-97.41	-53.71	-13	40.71
3 298.38	48.05	V	32.20	-37.10	43.15	-97.41	-54.26	-13	41.26
4 123.00	48.01	H	33.65	-36.22	45.44	-97.41	-51.97	-13	38.97
4 123.28	54.29	V	33.65	-36.22	51.72	-97.41	-45.69	-13	32.69
Above 4 200.00	Not detected	-	-	-	-	-	-	-	-

LTE band 26/5 Part 22 (10 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Middle Channel (836.5 MHz)									
1 664.31	55.22	H	26.66	-38.67	43.21	-97.41	-54.20	-13	41.20
1 664.31	56.56	V	26.66	-38.67	44.55	-97.41	-52.86	-13	39.86
2 496.53	60.46	H	29.47	-37.16	52.77	-97.41	-44.64	-13	31.64
2 496.53	61.03	V	29.47	-37.16	53.34	-97.41	-44.07	-13	31.07
3 328.47	53.87	H	32.14	-37.03	48.98	-97.41	-48.43	-13	35.43
3 328.47	49.53	V	32.14	-37.03	44.64	-97.41	-52.77	-13	39.77
4 160.69	52.45	H	33.74	-36.16	50.03	-97.41	-47.38	-13	34.38
4 160.97	52.96	V	33.74	-36.17	50.53	-97.41	-46.88	-13	33.88
5 000.50	43.69	V	34.80	-35.26	43.23	-97.41	-54.18	-13	41.18
Above 5 100.00	Not detected	-	-	-	-	-	-	-	-
High Channel (844.0 MHz)									
1 679.22	55.15	H	26.72	-38.68	43.19	-97.41	-54.22	-13	41.22
1 679.22	51.80	V	26.72	-38.68	39.84	-97.41	-57.57	-13	44.57
2 519.31	54.10	H	29.58	-36.93	46.75	-97.41	-50.66	-13	37.66
2 519.03	59.10	V	29.58	-36.94	51.74	-97.41	-45.67	-13	32.67
3 358.84	53.18	H	32.10	-36.97	48.31	-97.41	-49.10	-13	36.10
3 358.56	51.25	V	32.10	-36.97	46.38	-97.41	-51.03	-13	38.03
4 198.09	50.33	H	33.89	-36.26	47.96	-97.41	-49.45	-13	36.45
4 198.09	50.33	V	33.89	-36.26	47.96	-97.41	-49.45	-13	36.45
4 999.94	43.97	H	34.80	-35.26	43.51	-97.41	-53.90	-13	40.90
5 459.78	43.26	H	35.00	-34.29	43.97	-97.41	-53.44	-13	40.44
Above 5 500.00	Not detected	-	-	-	-	-	-	-	-

LTE band 26 Part 90 (10 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Middle Channel (819.0 MHz)									
1 629.44	60.72	H	25.56	-38.62	47.66	-97.41	-49.75	-13	36.75
1 629.44	65.10	V	25.56	-38.62	52.04	-97.41	-45.37	-13	32.37
1 875.25	52.05	V	27.45	-38.01	41.49	-97.41	-55.92	-13	42.92
2 444.22	55.29	H	28.19	-36.32	47.16	-97.41	-50.25	-13	37.25
2 444.94	58.30	V	28.19	-36.32	50.17	-97.41	-47.24	-13	34.24
3 258.44	57.99	H	30.45	-37.07	51.37	-97.41	-46.04	-13	33.04
3 258.72	61.64	V	30.45	-37.07	55.02	-97.41	-42.39	-13	29.39
4 072.94	54.52	H	31.90	-36.37	50.05	-97.41	-47.36	-13	34.36
4 073.22	52.93	V	31.90	-36.37	48.46	-97.41	-48.95	-13	35.95
5 000.22	45.35	V	33.00	-35.26	43.09	-97.41	-54.32	-13	41.32
Above 5 100.00	Not detected	-	-	-	-	-	-	-	-

LTE band 66/4 (15 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (1 717.5 MHz)									
3 421.40	50.51	H	32.19	-36.93	45.77	-95.26	-49.49	-13	36.49
3 421.40	51.06	V	32.19	-36.93	46.32	-95.26	-48.94	-13	35.94
4 999.70	42.86	V	34.80	-35.26	42.40	-95.26	-52.86	-13	39.86
5 131.90	56.76	H	34.47	-35.45	55.78	-95.26	-39.48	-13	26.48
5 132.30	60.61	V	34.47	-35.45	59.63	-95.26	-35.63	-13	22.63
6 842.80	52.29	H	35.70	-33.86	54.13	-95.26	-41.13	-13	28.13
6 843.30	54.02	V	35.70	-33.86	55.86	-95.26	-39.40	-13	26.40
8 553.80	63.90	H	36.91	-33.54	67.27	-95.26	-27.99	-13	14.99
8 553.80	63.10	V	36.91	-33.54	66.47	-95.26	-28.79	-13	15.79
10 264.70	41.12	H	37.60	-31.27	47.45	-95.26	-47.81	-13	34.81
10 264.70	44.26	V	37.60	-31.27	50.59	-95.26	-44.67	-13	31.67
11 690.60	36.02	H	38.50	-30.01	44.51	-95.26	-50.75	-13	37.75
11 975.60	36.46	V	38.60	-30.36	44.70	-95.26	-50.56	-13	37.56
14 414.50	35.67	H	41.33	-27.36	49.64	-95.26	-45.62	-13	32.62
Above 14 500.00	Not detected	-	-	-	-	-	-	-	-

LTE band 66/4 (15 MHz - QPSK)

Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.I.R.P. (dB m)	Limit (dB m)	Margin (dB)
Middle Channel (1 745.0 MHz)									
3 476.30	49.27	H	32.35	-36.78	44.84	-95.26	-50.42	-13	37.42
3 476.30	49.25	V	32.35	-36.78	44.82	-95.26	-50.44	-13	37.44
4 999.20	43.13	V	34.80	-35.26	42.67	-95.26	-52.59	-13	39.59
5 214.40	55.35	H	34.30	-35.13	54.52	-95.26	-40.74	-13	27.74
5 214.80	59.92	V	34.30	-35.13	59.09	-95.26	-36.17	-13	23.17
6 953.00	50.22	H	35.91	-33.18	52.95	-95.26	-42.31	-13	29.31
6 953.00	56.30	V	35.91	-33.18	59.03	-95.26	-36.23	-13	23.23
7 003.10	48.26	V	36.01	-33.06	51.21	-95.26	-44.05	-13	31.05
8 691.10	65.27	H	37.18	-34.30	68.15	-95.26	-27.11	-13	14.11
8 691.60	66.45	V	37.18	-34.29	69.34	-95.26	-25.92	-13	12.92
10 429.70	42.74	H	37.70	-31.14	49.30	-95.26	-45.96	-13	32.96
10 429.70	44.62	V	37.70	-31.14	51.18	-95.26	-44.08	-13	31.08
Above 10 500.00	Not detected	-	-	-	-	-	-	-	-
High Channel (1 772.5 MHz)									
3 531.60	50.28	H	32.40	-36.88	45.80	-95.26	-49.46	-13	36.46
3 531.10	48.76	V	32.40	-36.88	44.28	-95.26	-50.98	-13	37.98
4 999.70	43.79	V	34.80	-35.26	43.33	-95.26	-51.93	-13	38.93
5 296.90	57.68	H	34.39	-34.81	57.26	-95.26	-38.00	-13	25.00
5 296.90	62.36	V	34.39	-34.81	61.94	-95.26	-33.32	-13	20.32
7 063.10	53.60	H	36.10	-33.09	56.61	-95.26	-38.65	-13	25.65
7 063.10	57.07	V	36.10	-33.09	60.08	-95.26	-35.18	-13	22.18
8 828.90	61.73	H	37.40	-32.94	66.19	-95.26	-29.07	-13	16.07
8 828.90	65.52	V	37.40	-32.94	69.98	-95.26	-25.28	-13	12.28
10 594.70	47.15	H	37.70	-30.78	54.07	-95.26	-41.19	-13	28.19
10 594.70	45.37	V	37.70	-30.78	52.29	-95.26	-42.97	-13	29.97
12 360.50	36.75	V	38.92	-28.87	46.80	-95.26	-48.46	-13	35.46
14 126.70	38.08	V	41.20	-27.93	51.35	-95.26	-43.91	-13	30.91
Above 14 200.00	Not detected	-	-	-	-	-	-	-	-