

TEST REPORT

of

FCC Part 2 Subpart J, Part 22 Subpart C/H,
Part 24 Subpart E and Part 27 Subpart C
IC RSS-130 Issue 2, RSS-132 Issue 4, RSS-133 Issue 7,
RSS-139 Issue 4, RSS-199 Issue 4 and RSS-Gen Issue 5

FCC ID: BEJTM16FNNABM0
IC Certification: 2703H-TM16FNNABM0

Equipment Under Test : Telematics Module

Model Name : TM16FNNABM0

Variant Model Name(s) : -

Applicant : FCC: LG Electronics USA, Inc.
IC: LG ELECTRONICS INC.

Manufacturer : LG Electronics Inc.

Date of Receipt : 2023.12.13

Date of Test(s) : 2023.12.13 ~ 2024.10.18

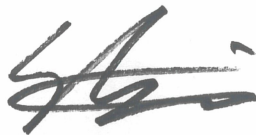
Date of Issue : 2024.10.18

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

- 1) The results of this test report are effective only to the items tested.
- 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.
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Tested by:



Hahyun Sung

Technical
Manager:



Jinhyoung Cho

SGS Korea Co., Ltd. Gunpo Laboratory

INDEX

<u>Table of Contents</u>	Page
1. General Information -----	3
2. E.R.P. / E.I.R.P. & Spurious Radiated Emission -----	14
3. Conducted Output Power -----	50
4. Occupied Bandwidth -----	68
5. Peak-Average Ratio -----	100
6. Spurious Emissions at Antenna Terminal -----	133
7. Band Edge and Emisison Mask -----	143
8. Frequency Stability -----	263

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

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1.2. Details of Applicant

FCC Applicant : LG Electronics USA

FCC Address : 111 Sylvan Avenue, North Building, Englewood Cliffs, New Jersey, United States, 07632

IC Applicant : LG ELECTRONICS INC.

IC Address : 222, LG-ro, Jinwi-myeon, Pyeongtaek-si, Gyeonggi-do, Korea (Republic of), 451-713

Contact Person : Kim, David

Phone No. : +1 201 470 2696

1.3. Details of Manufacturer

Company : LG Electronics Inc.

Address : 128, Yeoui-daero, Yeongdeungpo-gu, Seoul, Republic of Korea, 07336

1.4. Description of EUT

Kind of Product	Telematics Module		
Model Name	TM16FNNABM0		
Serial Number	Conducted: FCC_04 Radiated: FCC Rad_02		
Power Supply	DC 4.10 V		
Rated Power	NR Band 2, 5, 7, 12, 25, 66, 71: 23 dBm		
Frequency Range	NR Band 2: 1 850 MHz ~ 1 910 MHz NR Band 5: 824 MHz ~ 849 MHz NR Band 7: 2 500 MHz ~ 2 570 MHz NR Band 12: 699 MHz ~ 716 MHz NR Band 25: 1 850 MHz ~ 1 915 MHz NR Band 66: 1 710 MHz ~ 1 780 MHz NR Band 71: 663 MHz ~ 698 MHz		
Modulation Technique	BPSK, QPSK, 16QAM, 64QAM, 256QAM		
Antenna Type	Ant. 1: PIFA	Ant. 2: PIFA	Ant. 3: PIFA
Antenna Gain*	Refer to the clause 1.15		
H/W Version	Rev.D		
S/W Version	IN25XA06		
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. 11, 2024	Annual	Oct. 11, 2025
Spectrum Analyzer	R&S	FSV30	103453	Oct. 31, 2023	Annual	Oct. 31, 2024
Spectrum Analyzer	R&S	FSW43	100637	Apr. 08, 2024	Annual	Apr. 08, 2025
Spectrum Analyzer	Agilent	N9020A	MY53421758	Sep. 10, 2024	Annual	Sep. 10, 2025
Spectrum Analyzer	Agilent	N9030A	US51350132	Nov. 27, 2023	Annual	Nov. 27, 2024
Communication test station	Anritsu	MT8000A	6261949671	Oct. 11, 2024	Annual	Oct. 11, 2025
Communication Analyzer	Anritsu	MT8821C	6262192291	Feb. 08, 2024	Annual	Feb. 08, 2025
Power Meter	Anritsu	ML2495A	1223004	May 29, 2024	Annual	May 29, 2025
Power Sensor	Anritsu	MA2411B	1207272	May 29, 2024	Annual	May 29, 2025
Temperature Chamber	ESPEC CORP.	SH-662	93000533	Jun. 04, 2024	Annual	Jun. 04, 2025
Low Pass Filter	Mini-Circuits	NLP-1200+	V 8979400903-1	May 17, 2024	Annual	May 17, 2025
High Pass Filter	Wainwright Instrument GmbH	WHKX10-900-1000-18000-4 0SS	7	Feb. 27, 2024	Annual	Feb. 27, 2025
High Pass Filter	Wainwright Instrument GmbH	WHKX3.0/18G-10SS	21	Jun. 07, 2024	Annual	Jun. 07, 2025
High Pass Filter	Wainwright Instrument GmbH	WHNX7.5/26.5G-6SS	11	Oct. 16, 2024	Annual	Oct. 16, 2025
Power Splitter	Weinschel	1534	499	Nov. 03, 2023	Annual	Nov. 03, 2024
BRIDGE COUPLER	MARKI MICROWAVE INC.	CBR16-0012	1542	May 13, 2024	Annual	May 13, 2025
Directional Coupler	KRYTAR	152613	122660	Jul. 09, 2024	Annual	Jul. 09, 2025
DC Power Supply	Agilent	U8002A	MY49030063	Jan. 17, 2024	Annual	Jan. 17, 2025
Preamplifier	H.P.	8447F	2944A03909	Aug. 09, 2024	Annual	Aug. 09, 2025
Preamplifier	R&S	SCU 18F	101058	Dec. 07, 2023	Annual	Dec. 07, 2024
Preamplifier	MITEQ Inc.	JS44-18004000-35-8P	1546891	Oct. 14, 2024	Annual	Oct. 14, 2025
Test Receiver	R&S	ESU26	100109	Jan. 16, 2024	Annual	Jan. 16, 2025
Loop Antenna	Schwarzbeck Mess-Elektronik	FMZB 1519	1519-039	Aug. 21, 2023	Biennial	Aug. 21, 2025
Bilog Antenna	Schwarzbeck Mess-Elektronik	VULB9163	9163-437	May 31, 2023	Biennial	May 31, 2025
Bilog Antenna	Schwarzbeck Mess-Elektronik	VULB9163	9163-396	Apr. 02, 2024	Biennial	Apr. 02, 2026
Horn Antenna	R&S	HF906	100326	Feb. 19, 2024	Annual	Feb. 19, 2025
Horn Antenna	Schwarzbeck Mess-Elektronik	BBHA 9170	9170-540	Dec. 05, 2023	Annual	Dec. 05, 2024
Antenna Master	Innco systems GmbH	MA4640-XP-ET	MA4640/536/3833 0516/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	CO3000/963/3833 0516/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, 2023	Semi-Annual	Apr. 04, 2024
Coaxial Cable	Qualwave Inc.	QA500-18-NN-10 (10 m)	22200114	Oct. 04, 2023	Semi-Annual	Apr. 04, 2024
Coaxial Cable	RFONE	NMST-13A26-NMST-5 m	TPC2402190004	Oct. 04, 2024	Semi-Annual	Apr. 04, 2025
Coaxial Cable	Qualwave Inc.	NMST-13A26-NMST-10 m	TPC2402190001	Oct. 04, 2024	Semi-Annual	Apr. 04, 2025
Coaxial Cable	RADIALL	TESTPRO 3	182287	Oct. 11, 2024	Semi-Annual	Apr. 11, 2025
Coaxial Cable	RADIALL	TESTPRO 3	182288	Oct. 11, 2024	Semi-Annual	Apr. 11, 2025
Coaxial Cable	RADIALL	TESTPRO 3	182291	Oct. 11, 2024	Semi-Annual	Apr. 11, 2025

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 and 27 IC RSS-Gen Issue 5, RSS-130 Issue 2, RSS-132 Issue 4, RSS-133 Issue 7, RSS-139 Issue 4 and RSS-199 Issue 4			
Section(s) in FCC	Section(s) in IC	Test Item	Result
§2.1046 §22.913(a)(5) §24.232(c) §27.50(c)(9)(10) §27.50(d)(4) §27.50(h)(2)	RSS-130 Issue 2 4.6 RSS-132 Issue 4 5.4 RSS-133 Issue 7 5.5 RSS-139 Issue 4 5.5 RSS-199 Issue 4 5.5	E.R.P. / E.I.R.P.	Pass
§22.917(a) §24.238(a) §27.53(g) §27.53(h)(1) §27.53(m)(4)	RSS-130 Issue 2 4.7 RSS-132 Issue 4 5.5 RSS-133 Issue 7 5.6 RSS-139 Issue 4 5.6 RSS-199 Issue 4 5.6	Spurious Radiated Emission	Pass
§2.1046	RSS-Gen Issue 5 6.12	Conducted Output Power	Pass
§2.1049	RSS-Gen Issue 5 6.7	Occupied Bandwidth	Pass
§22.913(d) §24.232(d) §27.50(d)(5)	RSS-130 Issue 2 4.6 RSS-132 Issue 4 5.4 RSS-133 Issue 7 5.5 RSS-139 Issue 4 5.5 RSS-199 Issue 4 5.5	Peak-Average Ratio	Pass
§22.917(a) §24.238(a) §27.53(g) §27.53(h)(1) §27.53(m)(4)	RSS-130 Issue 2 4.7 RSS-132 Issue 4 5.5 RSS-133 Issue 7 5.6 RSS-139 Issue 4 5.6 RSS-199 Issue 4 5.6	Spurious Emission at Antenna Terminal	Pass
§22.917(a) §24.238(a) §27.53(g) §27.53(h)(1) §27.53(m)(4)	RSS-130 Issue 2 4.7 RSS-132 Issue 4 5.5 RSS-133 Issue 7 5.6 RSS-139 Issue 4 5.6 RSS-199 Issue 4 5.6	Band Edge	Pass
§2.1055 §22.355 §24.235 §27.54	RSS-Gen Issue 5 6.11 RSS-130 Issue 2 4.5 RSS-132 Issue 4 5.3 RSS-133 Issue 7 5.4 RSS-139 Issue 4 5.4 RSS-199 Issue 4 5.4	Frequency Stability	Pass

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;

NR Band 2 (1 850 MHz ~ 1 910 MHz) is covered by NR 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 NR Band 2 as well as Band 25.

1.9. Manufacturer Declaration

The EUT has three antennas, antennas 1 and 2 are the main antennas, and antenna 3 can be switched to the main antenna 1. Antennas 1 and 3 are use the same module output port and are operated by switching. The EUT can be transmitted simultaneously to antennas 1 and 2 in TX diversity and MIMO modes. MIMO mode is supporting only CP-OFDM mode on LTE Band 48, NR Band 48, 77 and 78. TX diversity mode is supporting only NR Band 77.

1.10. ENDC Configuration

NR Band	SCS (kHz)	Bandwidth (MHz)	Waveform	Modulation	ENDC LTE Band
n2	15	5, 10, 15, 20	DFT-S OFDM, CP OFDM	BPSK, QPSK, 16QAM, 64QAM, 256QAM	5, 12, 13, 48
n5	15	5, 10, 15, 20			2, 66
n66	15	5, 10, 15, 20, 40			5, 12, 13, 48
n71	15	5, 10, 15, 20			2, 7, 66

1.11. Worst Case Configuration and Mode

The worst-case is based on the conducted output power measurement investigation results. All testing was performed using BPSK, QPSK, 16QAM, 64QAM and 256QAM modulations. If both SA and NSA were supported, SA was tested as worst case and NSA was tested only radiated spurious emission for worst conducted output power combination.

On ENDC mode, only radiated spurious emission were tested as worst case for worst conducted output power combination.

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.

The peak to average ratio were tested only 256QAM 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.

1.12. Measurement Configuration

Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-S-OFDM					Modulation CP-OFDM				RB #		
		Low	Mid	High	5	10	15	20	25	30	40	50	60	70	80	90	100	BPSK	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	1	Half	Full			
Conducted Output Power	n25/2	V	V	V	V	V	V	V	V	V	V							V	V	V	V	V	V	V	-	-	V	V	V			
	n5	V	V	V	V	V	V	V										V	V	V	V	V	V	V	-	-	V	V	V			
	n7	V	V	V	V	V	V	V										V	V	V	V	V	V	V	-	-	V	V	V			
	n12	V	V	V	V	V	V											V	V	V	V	V	V	V	-	-	V	V	V			
	n66	V	V	V	V	V	V	V	V	V	V							V	V	V	V	V	V	V	-	-	V	V	V			
	n71	V	V	V	V	V	V	V										V	V	V	V	V	V	V	-	-	V	V	V			
Frequency Stability	n25/2	-	V	-	V	-	-	-	-	-	-							-	V	-	-	-	-	-	-	-	-	-	-	V		
	n5	-	V	-	V	-	-	-										-	V	-	-	-	-	-	-	-	-	-	-	V		
	n7	-	V	-	V	-	-	-										-	V	-	-	-	-	-	-	-	-	-	-	V		
	n12	-	V	-	V	-	-											-	V	-	-	-	-	-	-	-	-	-	-	V		
	n66	-	V	-	V	-	-	-	-	-	-							-	V	-	-	-	-	-	-	-	-	-	-	V		
	n71		V		V	-	-	-										-	V	-	-	-	-	-	-	-	-	-	-	V		
Occupied Bandwidth	n25/2	-	V	-	V	V	V	V	V	V	V							V	V	V	-	-	V	V	-	-	-	-	-	V		
	n5	-	V	-	V	V	V	V										V	V	V	-	-	V	V	-	-	-	-	-	V		
	n7	-	V	-	V	V	V	V										V	V	V	-	-	V	V	-	-	-	-	-	V		
	n12	-	V	-	V	V	V											V	V	V	-	-	V	V	-	-	-	-	-	V		
	n66	-	V	-	V	V	V	V	V	V	V							V	V	V	-	-	V	V	-	-	-	-	-	V		
	n71	-	V	-	V	V	V	V										V	V	V	-	-	V	V	-	-	-	-	-	V		
Peak-to-Average Ratio	n25/2	V	V	V	V	V	V	V	V	V	V							-	-	-	-	V	-	-	-	V	-	-	-	V		
	n5	V	V	V	V	V	V	V										-	-	-	-	V	-	-	-	V	-	-	-	V		
	n7	V	V	V	V	V	V	V										-	-	-	-	V	-	-	-	V	-	-	-	V		
	n12	V	V	V	V	V	V											-	-	-	-	V	-	-	-	V	-	-	-	V		
	n66	V	V	V	V	V	V	V	V	V	V							-	-	-	-	V	-	-	-	V	-	-	-	V		
	n71	V	V	V	V	V	V	V										-	-	-	-	V	-	-	-	V	-	-	-	V		
Band edge	n25/2	V	-	V	V	V	V	V	V	V	V							-	V	V	-	-	V	V	-	-	V	-	-	V		
	n5	V	-	V	V	V	V	V										-	V	V	-	-	V	V	-	-	V	-	-	V		
	n7	V	-	V	V	V	V	V										-	V	V	-	-	V	V	-	-	V	-	-	V		
	n12	V	-	V	V	V	V											-	V	V	-	-	V	V	-	-	V	-	-	V		
	n66	V	-	V	V	V	V	V	V	V	V							-	V	V	-	-	V	V	-	-	V	-	-	V		
	n71	V	-	V	V	V	V	V										-	V	V	-	-	V	V	-	-	V	-	-	V		
Spurious at antenna terminal & Radiated Spurious Emissions	n25/2	V	V	V	Worst case																											
	n5	V	V	V	Worst case																											
	n7	V	V	V	Worst case																											
	n12	V	V	V	Worst case																											
	n66	V	V	V	Worst case																											
	n71	V	V	V	Worst case																											

ENDC

Test Items	Band	Test Channel			Bandwidth (MHz)																Modulation DFT-S-OFDM					Modulation CP-OFDM				RB #		
		Low	Mid	High	5	10	15	20	25	30	40	50	60	70	80	90	100	BPSK	QPSK	16QAM	64QAM	256QAM	QPSK	16QAM	64QAM	256QAM	1	Half	Full			
Conducted Output Power	n2	V	V	V	V	V	V	V	V	V	V							V	V	-	-	-	-	-	-	-	-	V	-	-		
	n5	V	V	V	V	V	V	V										V	V	-	-	-	-	-	-	-	-	V	-	-		
	n66	V	V	V	V	V	V	V	V	V	V							V	V	-	-	-	-	-	-	-	-	V	-	-		
	n71	V	V	V	V	V	V	V										V	V	-	-	-	-	-	-	-	-	V	-	-		
Spurious Radiated Emission	n2	V	V	V	Worst case																											
	n5	V	V	V	Worst case																											
	n66	V	V	V	Worst case																											
	n71	V	V	V	Worst case																											

Note;

- All measurement was performed with 1RB or FULL RB or both, we chosen RB condition for each test items as worst case.

Radiated Emission Test

NR Band	SCS (kHz)	Bandwidth (MHz)	Modulation	Resource Block Allocation
				RBs allocated
n25/2	15	40	DFT-S OFDM - QPSK	1
n5	15	20	DFT-S OFDM - QPSK	1
n7	15	20	DFT-S OFDM - BPSK	1
n12	15	15	DFT-S OFDM - QPSK	1
n66	15	20	DFT-S OFDM - BPSK	1
n71	15	20	DFT-S OFDM - QPSK	1

ENDC

NR Band	SCS (kHz)	Bandwidth (MHz)	Modulation	Resource Block Allocation
				RBs allocated
5A-n2A	15	10-40	DFT-S OFDM - QPSK	1
7A-n5A	15	20-20	DFT-S OFDM - QPSK	1
5A-n66A	15	10-20	DFT-S OFDM - BPSK	1
66A-n71A	15	20-20	DFT-S OFDM - QPSK	1

1.13. Measurement Uncertainty

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

Parameter	Uncertainty	
RF Output Power	0.33 dB	
Occupied Bandwidth	0.05 MHz	
Conducted Spurious Emissions	0.99 dB	
Peak to Average Ratio	0.66 dB	
Frequency Stability	116 Hz	
Radiated Emission, 9 kHz to 30 MHz	H	3.60 dB
	V	3.60 dB
7Radiated Emission, below 1 GHz	H	4.60 dB
	V	4.90 dB
Radiated Emission, above 1 GHz	H	3.90 dB
	V	3.80 dB

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

1.14. Test Report Revision

Revision	Report Number	Date of Issue	Description
0	F690501-RF-RTL005483	2024.10.18	Initial

1.15. Antenna Information

Ant. No.	Ant. Type	Frequency Range	Support Band		
			LTE	NR	WCDMA
Ant. 1	PIFA	Below 3 GHz, Above 3 GHz	2, 4, 5, 7, 12, 13, 17, 25, 26, 38, 42, 48, 66, 71	2, 5, 7, 12, 25, 41, 42, 48, 66, 71, 77, 78	II, V
Ant. 2	PIFA	Above 3 GHz	42, 48	48, 77, 78	
Ant. 3	PIFA	Below 3 GHz, Above 3 GHz	2, 4, 5, 7, 12, 13, 17, 25, 26, 38, 42, 48, 66, 71	2, 5, 7, 12, 25, 41, 42, 48, 66, 71, 77, 78	II, V
Ant.1 + Ant. 2	PIFA	Above 3 GHz		48, 77, 78	

Note;

- Ant. 1 and Ant. 3 are in switching.

Band	Operating Frequency (MHz)	Antenna Peak Gain (dB i)			
		Ant. 1	Ant. 2	Ant. 3	Ant. 1 + Ant. 2
LTE 25/2 WCDMA II NR 25/2	1 850 ~ 1 915	<u>1.86</u>		-0.32	
LTE 66/4 NR 66	1 710 ~ 1 780	<u>1.37</u>		-0.03	
LTE 26/5 WCDMA V NR 5	824 ~ 849	<u>-2.43</u>		-3.16	
LTE 7 NR 7	2 500 ~ 2 570	0.92		<u>2.79</u>	
LTE 12/17 NR 12	699 ~ 716	-3.98		<u>-1.20</u>	
LTE 13	777 ~ 787	-4.60		<u>-3.16</u>	
LTE 26	814 ~ 824	<u>-2.43</u>		-3.16	
LTE 38	2 570 ~ 2 620	0.92		<u>2.79</u>	
LTE 48	3 550 ~ 3 700	-0.66	-1.37	<u>0.96</u>	
NR 48	3 550 ~ 3 700	-0.66	-1.37	<u>0.96</u>	<u>2.00</u>
LTE 71 NR 71	663 ~ 698	-2.45		<u>-1.60</u>	
NR 41	2 496 ~ 2 690	0.92		<u>2.79</u>	
NR 77	3 450 ~ 3 550	0.34	0.12	<u>1.58</u>	<u>3.24</u>
	3 700 ~ 3 980	0.34	0.12	<u>1.58</u>	<u>3.24</u>
NR 78	3 450 ~ 3 550	0.34	0.12	<u>1.58</u>	<u>3.24</u>
	3 700 ~ 3 800	0.34	0.12	<u>1.58</u>	<u>3.24</u>

Note;

Antenna gains were compared between antennas and mark the worst gain of each band.

1) According to KDB 662911 D01 Multiple Transmitter Output v02r01 F)2)d(i),
Port 1 + Port 2 Antenna Gain = $10 * \log[(10^{G_1/20} + 10^{G_2/20})^2 / N_{ANT}]$

Where,

G_1 = antenna gain of port 1,
 G_2 = antenna gain of port 2,
 N_{ANT} = the number of antennas

1.16. Emission Designator and Max Power

NR Band	Band width (MHz)	Modulation		Low Freq. (MHz)	Upper Freq. (MHz)	Conducted Average (dB m)	Worst Ant. Gain (dB i)	E.R.P. / E.I.R.P. Average (dB m)	E.R.P. / E.I.R.P. Average (W)	Emission Designator
n25/2	5	DFT-S OFDM	BPSK	1 852.5	1 912.5	23.57	1.86	25.43	0.349	4M49G7D
			QPSK			23.59		25.45	0.351	4M50G7D
			16QAM			22.55		24.41	0.276	4M52D7D
		CP OFDM	QPSK			22.17		24.03	0.253	4M52G7D
			16QAM			21.61		23.47	0.222	4M52D7D
	10	DFT-S OFDM	BPSK	1 855.0	1 910.0	23.62		25.48	0.353	8M91G7D
			QPSK			23.70		25.56	0.360	8M93G7D
			16QAM			22.72		24.58	0.287	8M95D7D
		CP OFDM	QPSK			22.40		24.26	0.267	9M27G7D
			16QAM			21.77		23.63	0.231	9M29D7D
	15	DFT-S OFDM	BPSK	1 857.5	1 907.5	23.58		25.44	0.350	13M5G7D
			QPSK			23.58		25.44	0.350	13M5G7D
			16QAM			22.76		24.62	0.290	13M5D7D
		CP OFDM	QPSK			22.49		24.35	0.272	14M2G7D
			16QAM			21.87		23.73	0.236	14M1D7D
	20	DFT-S OFDM	BPSK	1 860.0	1 905.0	23.68		25.54	0.358	17M9G7D
			QPSK			23.74		25.6	0.363	17M9G7D
			16QAM			22.61		24.47	0.280	17M9D7D
		CP OFDM	QPSK			22.42		24.28	0.268	18M9G7D
			16QAM			21.84		23.7	0.234	19M0D7D
	25	DFT-S OFDM	BPSK	1 862.5	1 902.5	23.73		25.59	0.362	23M4G7D
			QPSK			23.73		25.59	0.362	23M4G7D
			16QAM			22.76		24.62	0.290	23M4D7D
		CP OFDM	QPSK			22.50		24.36	0.273	24M2G7D
			16QAM			21.89		23.75	0.237	24M2D7D
	30	DFT-S OFDM	BPSK	1 865.0	1 900.0	23.63		25.49	0.354	29M0G7D
			QPSK			23.67		25.53	0.357	28M9G7D
			16QAM			22.66		24.52	0.283	28M9D7D
		CP OFDM	QPSK			22.59		24.45	0.279	28M9G7D
			16QAM			21.96		23.82	0.241	28M9D7D
	40	DFT-S OFDM	BPSK	1 870.0	1 895.0	23.65		25.51	0.356	38M8G7D
			QPSK			23.75		25.61	0.364	39M0G7D
			16QAM			22.66		24.52	0.283	38M8D7D
		CP OFDM	QPSK			22.45		24.31	0.270	38M8G7D
			16QAM			22.28		24.14	0.259	38M7D7D
n5	5	DFT-S OFDM	BPSK	826.5	846.5	22.90	-2.43	18.32	0.068	4M48G7D
			QPSK			22.90		18.32	0.068	4M48G7D
			16QAM			21.80		17.22	0.053	4M49D7D
		CP OFDM	QPSK			21.50		16.92	0.049	4M50G7D
			16QAM			20.90		16.32	0.043	4M51D7D
	10	DFT-S OFDM	BPSK	829.0	844.0	22.88		18.30	0.068	8M93G7D
			QPSK			22.89		18.31	0.068	8M93G7D
			16QAM			21.78		17.20	0.052	8M97D7D
		CP OFDM	QPSK			21.50		16.92	0.049	9M29G7D
			16QAM			20.85		16.27	0.042	9M27D7D
	15	DFT-S OFDM	BPSK	831.5	841.5	22.90		18.32	0.068	13M5G7D
			QPSK			22.90		18.32	0.068	13M5G7D
			16QAM			21.74		17.16	0.052	13M5D7D
		CP OFDM	QPSK			21.50		16.92	0.049	14M1G7D
			16QAM			20.89		16.31	0.043	14M1D7D
	20	DFT-S OFDM	BPSK	834.0	839.0	22.92		18.34	0.068	17M9G7D
			QPSK			23.01		18.43	0.070	17M9G7D
			16QAM			21.77		17.19	0.052	17M9D7D
		CP OFDM	QPSK			21.50		16.92	0.049	18M9G7D
			16QAM			20.91		16.33	0.043	18M9D7D

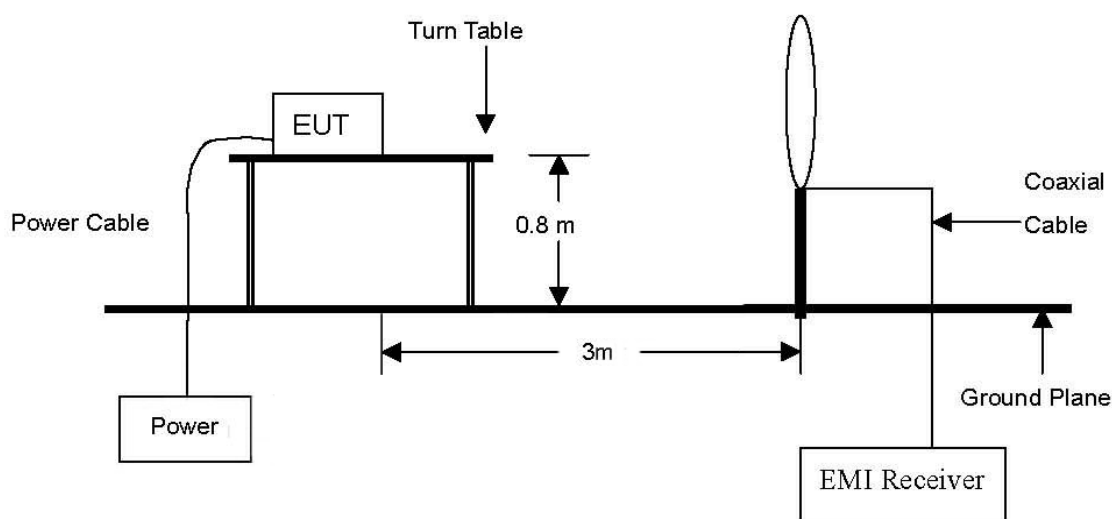
NR Band	Band width (MHz)	Modulation		Low Freq. (MHz)	Upper Freq. (MHz)	Conducted Average (dB m)	Worst Ant. Gain (dB i)	E.R.P. / E.I.R.P. Average (dB m)	E.R.P. / E.I.R.P. Average (W)	Emission Designator
n7	5	DFT-S OFDM	BPSK	2 502.5	2 567.5	23.78	-2.79	26.57	0.454	4M48G7D
			QPSK			23.81		26.60	0.457	4M49G7D
			16QAM			22.67		25.46	0.352	4M51D7D
		CP OFDM	QPSK			22.45		25.24	0.334	4M51G7D
			16QAM			21.85		24.64	0.291	4M52D7D
	10	DFT-S OFDM	BPSK	2 505.0	2 565.0	23.83		26.62	0.459	8M91G7D
			QPSK			23.84		26.63	0.460	8M95G7D
			16QAM			22.75		25.54	0.358	8M95D7D
		CP OFDM	QPSK			22.54		25.33	0.341	9M29G7D
			16QAM			21.95		24.74	0.298	9M27D7D
	15	DFT-S OFDM	BPSK	2 507.5	2 562.5	23.49		26.28	0.425	13M5G7D
			QPSK			23.54		26.33	0.430	13M5G7D
			16QAM			22.44		25.23	0.333	13M5D7D
		CP OFDM	QPSK			22.20		24.99	0.316	14M2G7D
			16QAM			21.58		24.37	0.274	14M1D7D
	20	DFT-S OFDM	BPSK	2 510.0	2 560.0	23.85		26.64	0.461	17M9G7D
			QPSK			23.57		26.36	0.433	17M9G7D
			16QAM			22.40		25.19	0.330	17M9D7D
		CP OFDM	QPSK			22.17		24.96	0.313	18M9G7D
			16QAM			21.54		24.33	0.271	19M0D7D
n12	5	DFT-S OFDM	BPSK	701.5	713.5	22.92	-1.20	19.57	0.091	4M51G7D
			QPSK			22.94		19.59	0.091	4M48G7D
			16QAM			21.73		18.38	0.069	4M51D7D
		CP OFDM	QPSK			21.46		18.11	0.065	4M51G7D
			16QAM			20.89		17.54	0.057	4M51D7D
	10	DFT-S OFDM	BPSK	704.0	711.0	22.86		19.51	0.089	8M91G7D
			QPSK			22.92		19.57	0.091	8M93G7D
			16QAM			21.78		18.43	0.070	8M95D7D
		CP OFDM	QPSK			21.51		18.16	0.065	9M29G7D
			16QAM			20.92		17.57	0.057	9M29D7D
	15	DFT-S OFDM	BPSK	706.5	708.5	22.84		19.49	0.089	13M5G7D
			QPSK			22.96		19.61	0.091	13M5G7D
			16QAM			21.85		18.50	0.071	13M5D7D
		CP OFDM	QPSK			21.55		18.20	0.066	13M5G7D
			16QAM			20.92		17.57	0.057	14M1D7D

NR Band	Band width (MHz)	Modulation		Low Freq. (MHz)	Upper Freq. (MHz)	Conducted Average (dB m)	Worst Ant. Gain (dB i)	E.R.P. / E.I.R.P. Average (dB m)	E.R.P. / E.I.R.P. Average (W)	Emission Designator
n66	5	DFT-S OFDM	BPSK	1 712.5	1 777.5	23.30	1.37	24.67	0.293	4M49G7D
			QPSK			23.35		24.72	0.296	4M49G7D
			16QAM			22.21		23.58	0.228	4M52D7D
		CP OFDM	QPSK			21.78		23.15	0.207	4M51G7D
			16QAM			21.23		22.60	0.182	4M51D7D
			16QAM			23.32		24.69	0.294	8M91G7D
	10	DFT-S OFDM	BPSK	1 715.0	1 775.0	23.33		24.70	0.295	8M93G7D
			QPSK			22.23		23.60	0.229	8M97D7D
			16QAM			21.90		23.27	0.212	9M29G7D
		CP OFDM	QPSK			21.30		22.67	0.185	9M27D7D
			16QAM			23.40		24.77	0.300	13M5G7D
			QPSK			23.38		24.75	0.299	13M5G7D
	15	DFT-S OFDM	16QAM	1 717.5	1 772.5	22.30		23.67	0.233	13M5D7D
			QPSK			21.92		23.29	0.213	14M2G7D
			16QAM			21.32		22.69	0.186	14M1D7D
		CP OFDM	QPSK			23.54		24.91	0.310	17M9G7D
			16QAM			23.40		24.77	0.300	17M9G7D
			16QAM			22.37		23.74	0.237	17M9D7D
	20	DFT-S OFDM	QPSK	1 720.0	1 770.0	21.80		23.17	0.207	19M0G7D
			16QAM			21.25		22.62	0.183	19M0D7D
			16QAM			23.48		24.85	0.305	22M9G7D
		CP OFDM	QPSK			23.47		24.84	0.305	22M9G7D
			16QAM			22.55		23.92	0.247	22M9D7D
			16QAM			22.06		23.43	0.220	23M8G7D
	25	DFT-S OFDM	16QAM	1 722.5	1 767.5	21.41		22.78	0.190	23M8D7D
			BPSK			23.45		24.82	0.303	28M6G7D
			QPSK			23.43		24.80	0.302	28M6G7D
		CP OFDM	16QAM			22.40		23.77	0.238	28M6D7D
			QPSK			21.91		23.28	0.213	28M6G7D
			16QAM			21.29		22.66	0.185	28M6D7D
	30	DFT-S OFDM	BPSK	1 725.0	1 765.0	23.54		24.91	0.310	38M6G7D
			QPSK			23.55		24.92	0.310	38M8G7D
			16QAM			22.32		23.69	0.234	38M7D7D
		CP OFDM	QPSK			21.90		23.27	0.212	38M6G7D
			16QAM			21.30		22.67	0.185	38M6D7D
	40	DFT-S OFDM	BPSK	1 730.0	1 760.0	22.87		19.12	0.082	4M49G7D
			QPSK			22.89		19.14	0.082	4M51G7D
			16QAM			21.83		18.08	0.064	4M50D7D
		CP OFDM	QPSK			21.40		17.65	0.058	4M51G7D
			16QAM			20.85		17.10	0.051	4M50D7D
			16QAM			22.75		19.00	0.079	8M89G7D
n71	5	DFT-S OFDM	BPSK	665.5	695.5	22.90	-1.60	19.15	0.082	8M93G7D
			QPSK			21.83		18.08	0.064	8M93D7D
			16QAM			21.45		17.70	0.059	9M27G7D
		CP OFDM	QPSK			20.84		17.09	0.051	9M25D7D
			16QAM			22.83		19.08	0.081	13M4G7D
			QPSK			22.85		19.10	0.081	13M5G7D
	10	DFT-S OFDM	16QAM	668.0	693.0	21.81		18.06	0.064	13M5D7D
			QPSK			21.38		17.63	0.058	14M2G7D
			16QAM			20.76		17.01	0.050	14M1D7D
		CP OFDM	QPSK			22.87		19.12	0.082	17M9G7D
			16QAM			22.98		19.23	0.084	17M9G7D
			16QAM			21.74		17.99	0.063	17M9D7D
	15	DFT-S OFDM	QPSK	670.5	690.5	21.39		17.64	0.058	18M9G7D
			16QAM			20.80		17.05	0.051	18M9D7D
			16QAM			22.87		19.12	0.082	17M9G7D
		CP OFDM	QPSK			22.98		19.23	0.084	17M9G7D
			16QAM			21.74		17.99	0.063	17M9D7D
			16QAM			21.39		17.64	0.058	18M9G7D
	20	DFT-S OFDM	16QAM	673.0	688.0	20.80		17.05	0.051	18M9D7D
			BPSK			22.87		19.12	0.082	17M9G7D
			QPSK			22.98		19.23	0.084	17M9G7D
		CP OFDM	16QAM			21.74		17.99	0.063	17M9D7D
			QPSK			21.39		17.64	0.058	18M9G7D
			16QAM			20.80		17.05	0.051	18M9D7D

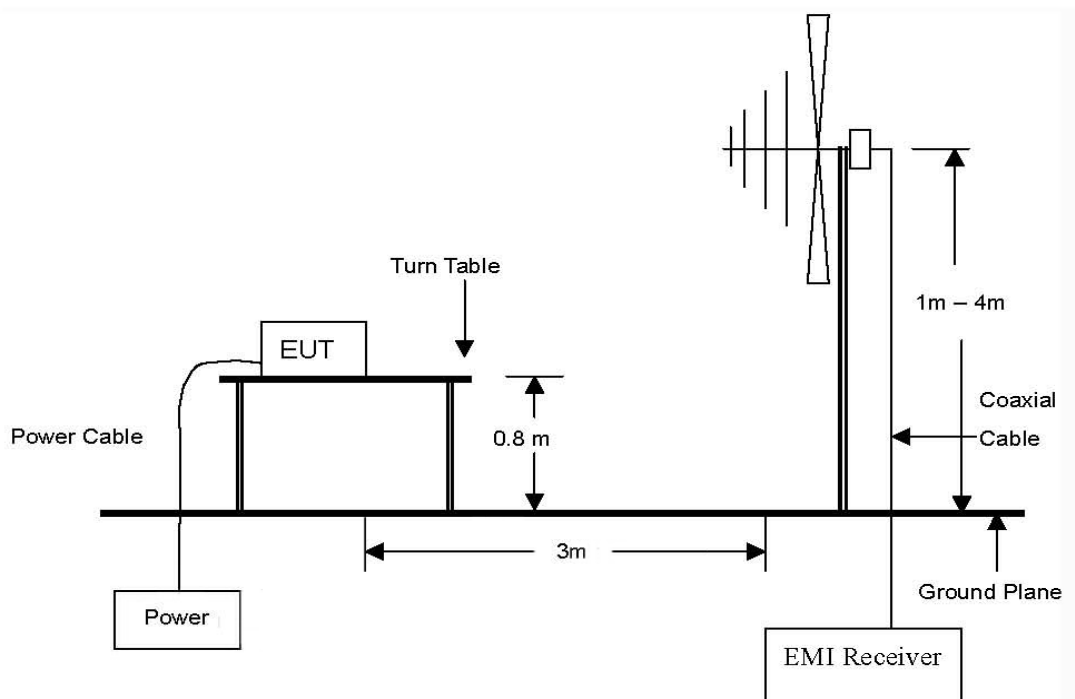
2. E.R.P. / E.I.R.P. & Radiated Spurious Emissions

2.1. Test setup

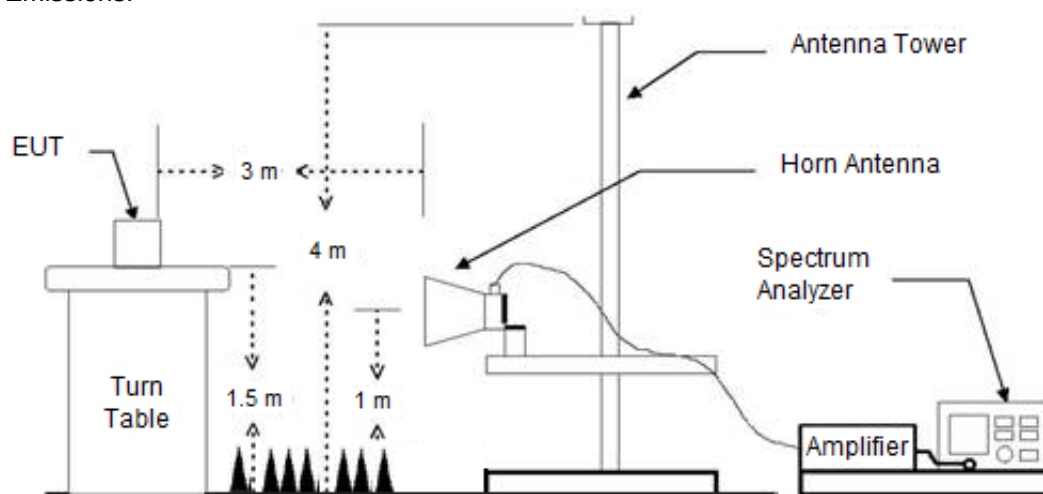
The diagram below shows the test setup that is utilized to make the measurements for emission from 9 kHz to 30 MHz.



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 30 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(c)(9), Portable stations (hand-held devices) transmitting in the 746-757 MHz, 776-788 MHz, and 805-806 MHz bands are limited to 3 watts ERP.
- §27.50(c)(10), portable stations (hand-held devices) in the 600 MHz uplink band and the 698-746 MHz band, and fixed and mobile stations in the 600 MHz uplink band are limited to 3 watts ERP.
- §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.

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- 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 4
5.4, 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.
The effective isotropic radiated power (e.i.r.p.) shall not exceed the limits specified in SRSP-503 for base station equipment.
- RSS-133 Issue 7
5.5, the maximum power spectral density of the equipment, measured in terms of average values, shall comply with the limits specified in table 2. These limits are either specified in terms of equivalent isotropically radiated power (e.i.r.p.) or TRP for the purpose of certification and may not apply to all deployment scenarios. Consult SRSP-510 for more deployment details in the bands 1 850-1 915 MHz and 1 930-1 995 MHz.

AAS equipment with eight antenna elements or less can demonstrate compliance with the e.i.r.p limit specified for non-AAS equipment in table 2, instead of the TRP limit.

Table 2: Maximum power spectral density of equipment

Equipment type	Maximum power spectral density
Non-AAS fixed station and base station	3 280 W/MHz e.i.r.p
AAS fixed station and base station	46 dB m/MHz TRP
Subscriber equipment	2 W/channel bandwidth e.i.r.p

- 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 dB m e.i.r.p./ channel bandwidth
Subscriber equipment	30 dB m e.i.r.p./ channel bandwidth

- RSS-199 Issue 4

5.5, the maximum output power of the equipment shall comply with the limits specified in table 3. In this table, maximum power refers to the equivalent isotropically radiated power (e.i.r.p.) or total radiated power (TRP), measured in terms of average values.

Subscriber equipment other than fixed subscriber equipment shall not exceed an e.i.r.p of 2W per channel bandwidth.

Fixed subscriber equipment shall not exceed the following:

- I. conducted power of 2W per channel bandwidth for all ports
- II. e.i.r.p of 40 W per channel bandwidth

The maximum power limits for fixed station and base station are provided in Table 3. The limits in this RSS are specified for the purpose of certification and may not apply to all deployment scenarios. Consult SRSP-517 for more deployment details in the band 2 500-2 690 MHz.

Table 3: Maximum power of fixed station and base station in the band 2 500-2 690 MHz

Equipment type	Maximum power
Non-AAS fixed station and base station	e.i.r.p of 1 640 W / MHz
AAS fixed station and base station	TRP of 43 dB m / MHz

2.2.2. Limit of Radiated Spurious Emissions

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(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.
- §27.53(m)(4), for mobile digital stations, the attenuation factor shall be not less than $40 + 10\log_{10}(P)$ dB on all frequencies between the channel edge and 5 megahertz from the channel edge, $43 + 10\log_{10}(P)$ dB on all frequencies between 5 megahertz and X megahertz from the channel edge, and $55 + 10\log_{10}(P)$ dB on all frequencies more than X megahertz from the channel edge, where X is the greater of 6 megahertz or the actual emission bandwidth as defined in paragraph (m)(6) of this section. In addition, the attenuation factor shall not be less than $43 + 10\log_{10}(P)$ dB on all frequencies between 2 490.5 MHz and 2 496 MHz and $55 + 10\log_{10}(P)$ dB at or below 2 490.5 MHz. Mobile Satellite Service licensees operating on frequencies below 2 495 MHz may also submit a documented interference complaint against BRS licensees operating on channel BRS Channel 1 on the same terms and conditions as adjacent channel BRS or EBS licensees.

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- 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 4

5.5, Equipment shall meet the unwanted emission limits specified 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 below the transmitter output power P (dB W) by at least $43 + 10 \log(p)$ dB.

(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 below the transmitter output power P (dB W) by at least $43 + 10 \log(p)$ dB. If the measurement is performed using 1 % of the occupied bandwidth, power integration over 100 kHz is required.

- RSS-133 Issue 7

5.6, Unwanted emissions shall be measured in terms of average values while the transmitter is operating at the manufacturer's rated power and modulated as specified in RSS-Gen.

Equipment shall meet the unwanted emission limits, specified in table 3, outside each frequency block group. For each channel bandwidth supported by the equipment under test, the unwanted emissions shall be measured and reported for two channel frequencies: one located as close as possible to the low end and one located as close as possible to the high end of the equipment's operating frequency range.

For the unwanted emission limits, in the 1 MHz bands immediately outside and adjacent to the frequency block group, the power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth (OBW). Beyond these 1 MHz bands, a resolution bandwidth of 1 MHz shall be used. A narrower resolution bandwidth may be used, provided that the measured power is integrated over the full required measurement bandwidth of 1 MHz, or 1% of the OBW, as applicable.

For all equipment, the TRP or total conducted power (sum of conducted power across all antenna connectors), where applicable, of the unwanted emissions outside the frequency block or frequency block group shall not exceed the limits shown in the table 3.

Table 3: Unwanted emission limits for all equipment

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

- 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 6: 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-199 Issue 4

5.6, unwanted emissions shall be measured in terms of average values when the transmitter is operating at the manufacturer's rated power and modulated as specified in RSS-Gen.

Equipment shall meet the unwanted emission limits, specified below, outside each frequency block group. For each channel bandwidth supported by the equipment under test, the unwanted emissions shall be measured and reported for two channel frequencies: one located as close as possible to the low end and one located as close as possible to the high end of the equipment's operating frequency range.

For the unwanted emission limits, in the 1 MHz band immediately outside and adjacent to the frequency block group, the power shall be measured with a resolution bandwidth of at least 1% of the occupied bandwidth for fixed stations, base stations, and fixed subscriber equipment, and 2 % for subscriber equipment other than fixed subscriber equipment. Beyond this 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.

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

Table 4: Unwanted emission limits for fixed station, base station and fixed subscriber equipment

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

* OB is the occupied bandwidth

Table 5: Unwanted emission limits for subscriber equipment other than fixed subscriber equipment

Offset from the edge of the frequency block or frequency block group (MHz)	Unwanted emission limit
0-1	-10 dB m/(2% of OB*)
1-5	-10 dB m/MHz
5-X**	-13 dB m/MHz
≥X	-25 dB m/MHz

* OB is the occupied bandwidth

** X is 6 MHz or the equipment occupied bandwidth, whichever is greater

In addition to complying with the limits in table 5, subscriber equipment other than fixed subscriber equipment shall not exceed -13 dB m/MHz on all frequencies between 2 490.5 MHz and 2 496 MHz, and -25 dB m/MHz at or below 2 490.5 MHz.

2.3. Test Procedure

2.3.1. E.R.P. or E.I.R.P. from conducted RF output power

According to subclause 5.2.5.5 of ANSI C63.26-2015 E.R.P. and E.I.R.P. are defined as the product of the power supplied to the antenna and its gain.

The relevant equation for determining the E.R.P. or E.I.R.P. from the conducted RF output power measured using the guidance provided above is:

$$\text{E.R.P. or E.I.R.P.} = P_{\text{Meas}} + G_T$$

where:

E.R.P. or E.I.R.P. = effective radiated power or equivalent isotropically radiated power, respectively
(expressed in the same units as P_{Meas} , typically dBW or dBm);

P_{Meas} = measured transmitter output power or PSD, in dBm or dBW;

G_T = gain of the transmitting antenna, in dBd (ERP) or dBi (EIRP);

2.3.2. Radiated Spurious Emissions

The test 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 $\geq 3 \times$ 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 : $(23 \pm 1) ^\circ\text{C}$
Relative humidity : 47 % R.H.

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

Band	Frequency (MHz)	Maximum Conducted Power (dB m)	Maximum Conducted Power (W)	Worst 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)	Output Power Limit
n25/2	1 850 ~ 1 915	23.75	0.237	1.86	25.61	0.364			2 W E.I.R.P.
n5	824 ~ 849	23.01	0.200	-2.43	20.58	0.114	18.43	0.070	7 W E.R.P.
n7	2 500 ~ 2 570	23.85	0.243	2.79	26.64	0.461			2 W E.I.R.P.
n12	699 ~ 716	22.96	0.198	-1.20	21.76	0.150	19.61	0.091	30 W E.R.P.
n66	1 710 ~ 1 755	23.51	0.224	1.37	24.88	0.308			1 W E.I.R.P.
n71	663 ~ 698	22.98	0.199	-1.60	21.38	0.137	19.23	0.084	3 W E.R.P.

Remark;

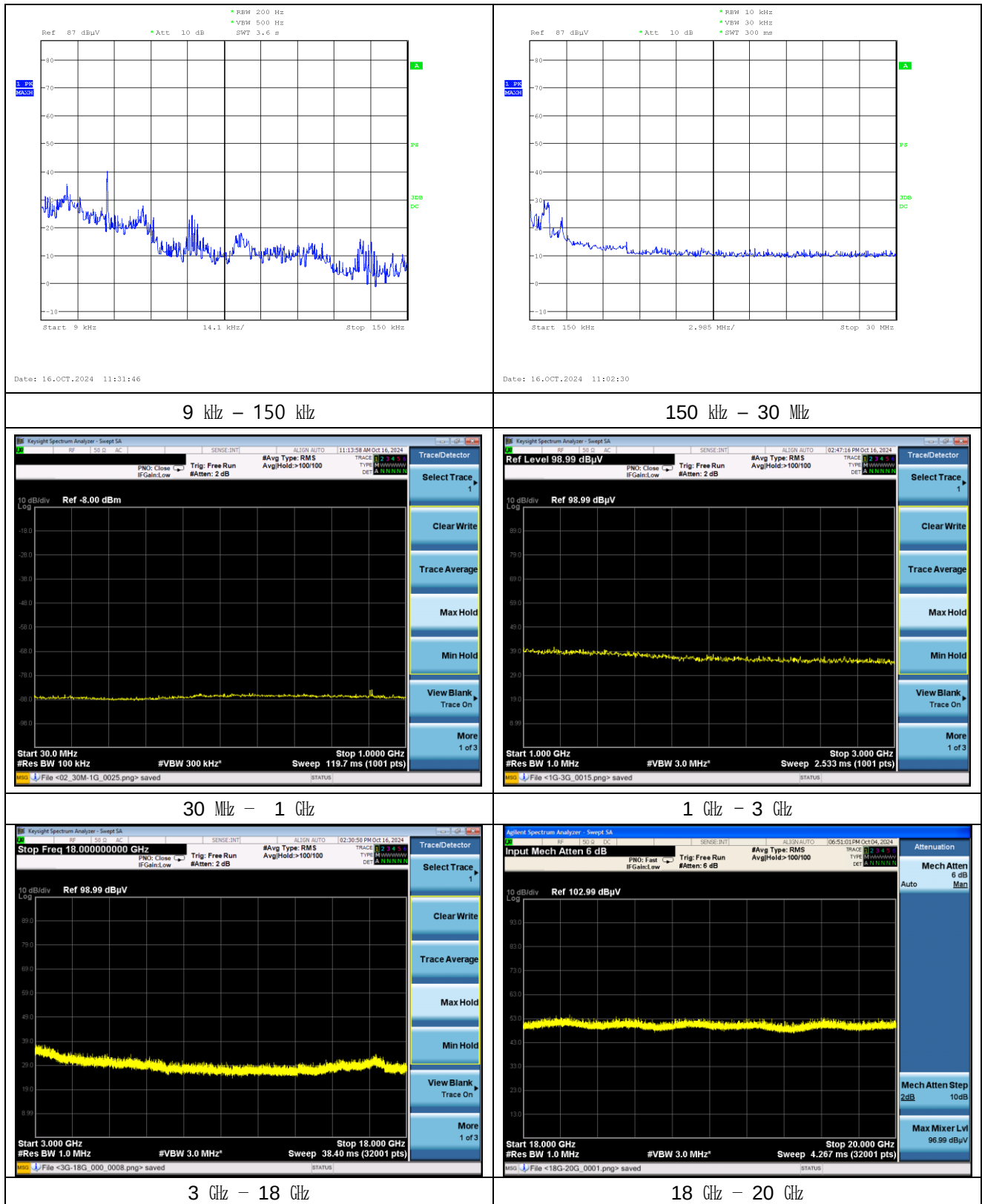
1. E.I.R.P. (dB m) = Maximum Conducted Power (dB m) + Antenna Gain (dB i)
2. E.R.P. (dB m) = E.I.R.P. (dB m) - 2.15 (dB); where E.R.P. and E.I.R.P. are expressed in consistent units.

2.4.2. Radiated Spurious Emissions

- Ant. 1_Below 3 GHz

NR Band 25/2 (40 MHz - DFT-S-OFDM 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 (1 870.0 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (1 882.5 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-
High Channel (1 895.0 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-

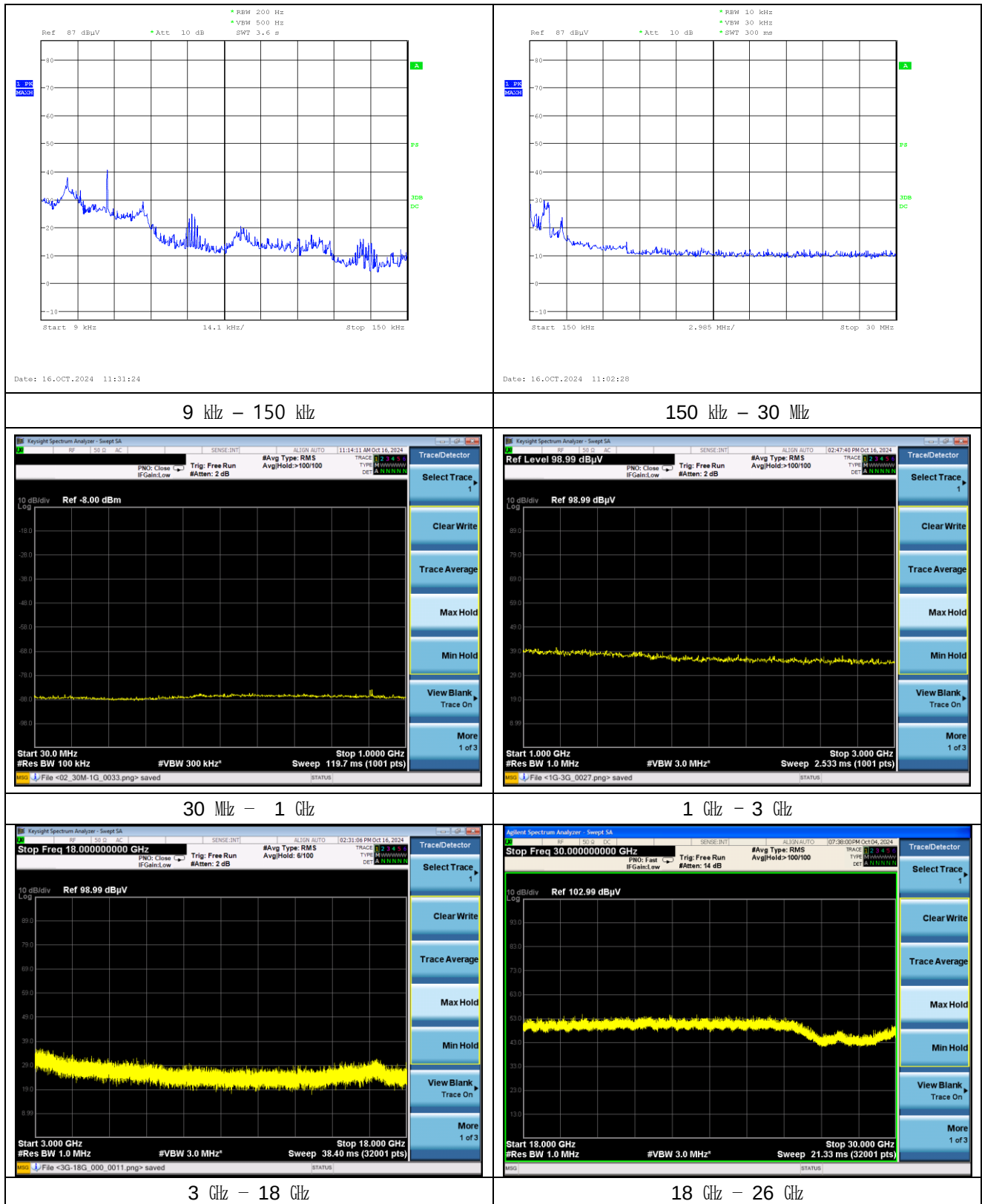


NR Band 5 (20 MHz - DFT-S-OFDM QPSK)

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 (834.0 MHz)									
1 108.50	54.86	H	24.73	-38.23	41.36	-97.41	-56.05	-13	43.05
1 109.66	53.78	V	24.74	-38.21	40.31	-97.41	-57.10	-13	44.10
2 474.13	52.08	H	28.30	-33.02	47.36	-97.41	-50.05	-13	37.05
2 474.27	57.89	V	28.30	-33.01	53.18	-97.41	-44.23	-13	31.23
Above 2 500.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (836.5 MHz)									
1 108.70	56.27	H	24.73	-38.23	42.77	-97.41	-54.64	-13	41.64
1 110.34	53.69	V	24.74	-38.19	40.24	-97.41	-57.17	-13	44.17
2 481.66	51.31	H	28.33	-33.36	46.28	-97.41	-51.13	-13	38.13
2 481.70	55.36	V	28.33	-33.36	50.33	-97.41	-47.08	-13	34.08
Above 2 500.00	Not detected	-	-	-	-	-	-	-	-
High Channel (839.0 MHz)									
1 108.91	54.93	H	24.74	-38.22	41.45	-97.41	-55.96	-13	42.96
1 109.69	53.60	V	24.74	-38.21	40.13	-97.41	-57.28	-13	44.28
2 489.08	50.41	H	28.36	-33.79	44.98	-97.41	-52.43	-13	39.43
2 488.97	54.86	V	28.36	-33.78	49.44	-97.41	-47.97	-13	34.97
Above 2 500.00	Not detected	-	-	-	-	-	-	-	-

NR Band 7 (20 MHz - DFT-S-OFDM BPSK)

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 (2 510.0 MHz)									
Below 1 000.00	Not detected	–	–	–	–	–	–	–	–
Above 1 000.00	Not detected	–	–	–	–	–	–	–	–
Middle Channel (2 535.0 MHz)									
Below 1 000.00	Not detected	–	–	–	–	–	–	–	–
Above 1 000.00	Not detected	–	–	–	–	–	–	–	–
High Channel (2 560.0 MHz)									
Below 1 000.00	Not detected	–	–	–	–	–	–	–	–
Above 1 000.00	Not detected	–	–	–	–	–	–	–	–

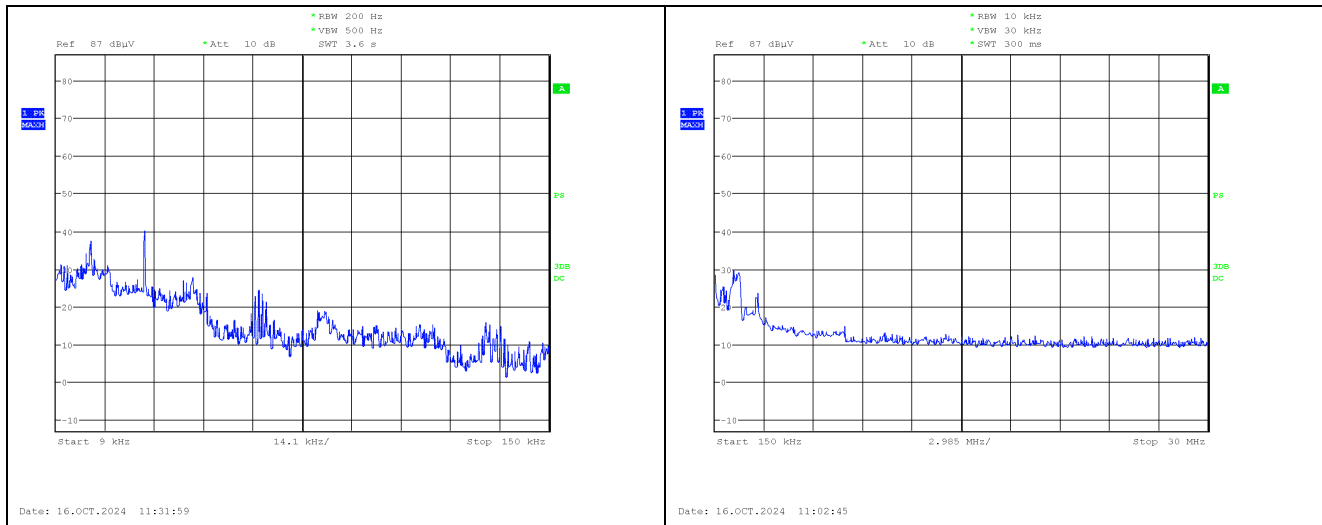


NR Band 12 (15 MHz - DFT-S-OFDM QPSK)

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 (706.5 MHz)									
1 110.10	50.19	H	24.74	-38.19	36.74	-97.41	-60.67	-13	47.67
1 109.90	50.60	V	24.74	-38.21	37.13	-97.41	-60.28	-13	47.28
1 332.61	51.37	H	25.03	-36.62	39.78	-97.41	-57.63	-13	44.63
1 332.96	52.72	V	25.03	-36.63	41.12	-97.41	-56.29	-13	43.29
1 399.09	49.43	H	25.10	-37.45	37.08	-97.41	-60.33	-13	47.33
1 399.34	48.53	V	25.10	-37.45	36.18	-97.41	-61.23	-13	48.23
2 098.83	52.25	H	27.90	-33.68	46.47	-97.41	-50.94	-13	37.94
2 099.06	59.90	V	27.90	-33.67	54.13	-97.41	-43.28	-13	30.28
Above 2 100.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (707.5 MHz)									
1 108.90	51.43	H	24.74	-38.22	37.95	-97.41	-59.46	-13	46.46
1 109.80	49.84	V	24.74	-38.21	36.37	-97.41	-61.04	-13	48.04
1 333.06	51.26	H	25.03	-36.63	39.66	-97.41	-57.75	-13	44.75
1 333.02	52.84	V	25.03	-36.63	41.24	-97.41	-56.17	-13	43.17
1 401.16	48.46	H	25.10	-37.45	36.11	-97.41	-61.30	-13	48.30
1 401.38	51.36	V	25.10	-37.45	39.01	-97.41	-58.40	-13	45.40
2 102.00	54.61	H	27.89	-33.70	48.80	-97.41	-48.61	-13	35.61
2 101.98	60.93	V	27.89	-33.70	55.12	-97.41	-42.29	-13	29.29
Above 2 200.00	Not detected	-	-	-	-	-	-	-	-
High Channel (708.5 MHz)									
1 109.80	51.05	H	24.74	-38.21	37.58	-97.41	-59.83	-13	46.83
1 108.80	49.77	V	24.74	-38.23	36.28	-97.41	-61.13	-13	48.13
1 332.80	51.80	H	25.03	-36.62	40.21	-97.41	-57.20	-13	44.20
1 332.86	52.15	V	25.03	-36.63	40.55	-97.41	-56.86	-13	43.86
1 403.15	48.80	H	25.11	-37.44	36.47	-97.41	-60.94	-13	47.94
1 403.36	48.99	V	25.11	-37.43	36.67	-97.41	-60.74	-13	47.74
2 104.88	54.75	H	27.87	-33.75	48.87	-97.41	-48.54	-13	35.54
2 105.04	59.17	V	24.74	-38.21	37.58	-97.41	-59.83	-13	46.83
Above 2 200.00	Not detected	-	-	-	-	-	-	-	-

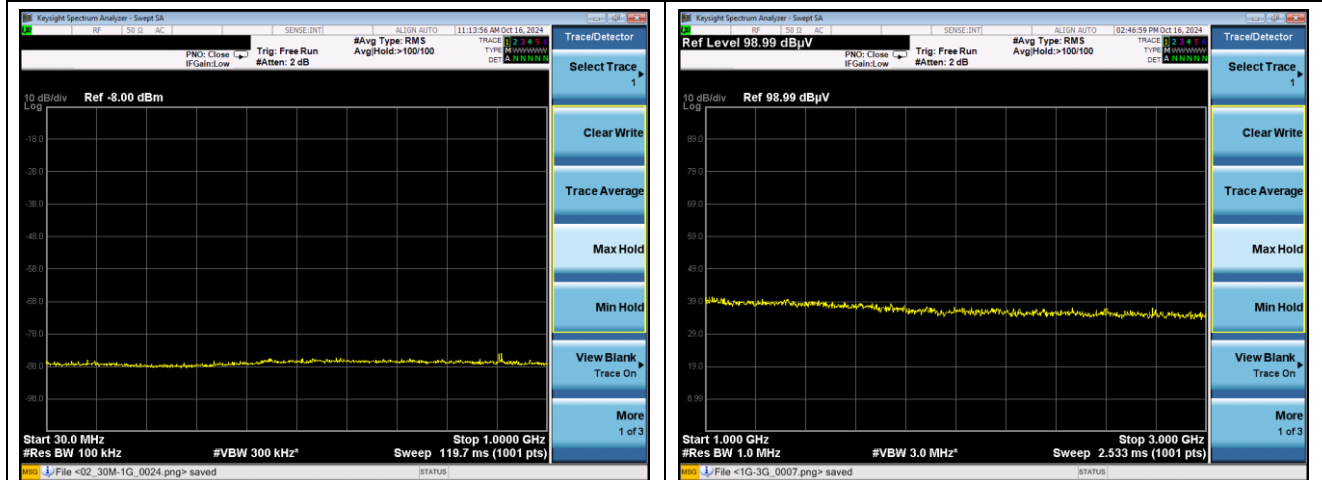
NR Band 66 (20 MHz - DFT-S-OFDM BPSK)

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 (1 720.0 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (1 745.0 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-
High Channel (1 770.0 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-



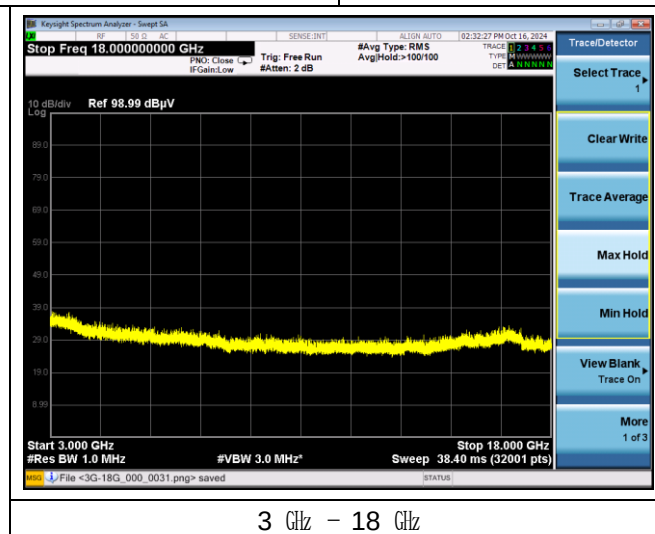
9 kHz – 150 kHz

150 kHz – 30 MHz



30 MHz – 1 GHz

1 GHz – 3 GHz



3 GHz – 18 GHz

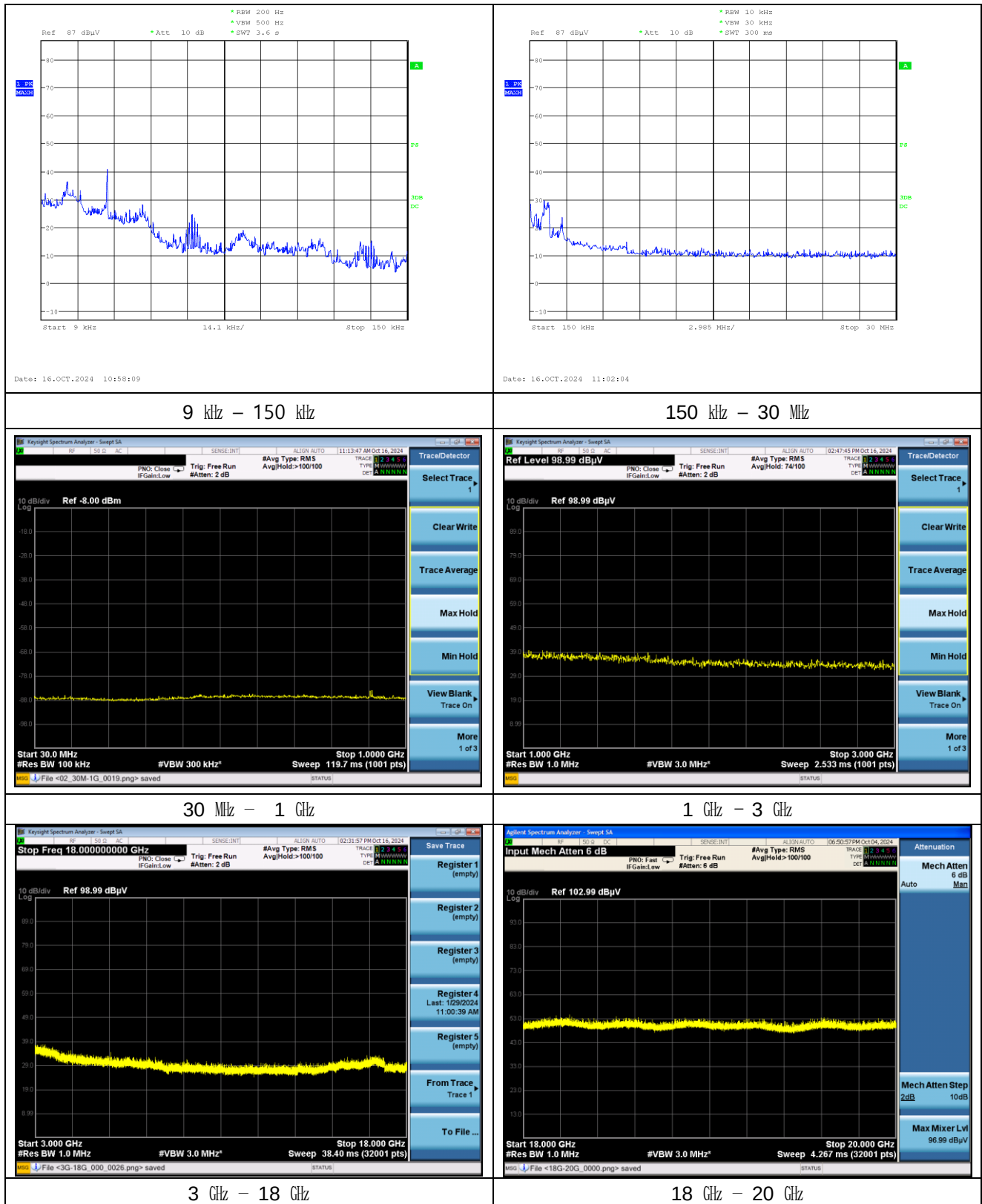
NR Band 71 (20 MHz - DFT-S-OFDM QPSK)

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 (673.0 MHz)									
1 109.30	52.70	H	24.74	-38.22	39.22	-97.41	-58.19	-13	45.19
1 109.00	50.17	V	24.74	-38.22	36.69	-97.41	-60.72	-13	47.72
1 364.52	50.24	H	25.03	-37.49	37.78	-97.41	-59.63	-13	46.63
1 364.64	45.88	V	25.03	-37.49	33.42	-97.41	-63.99	-13	50.99
2 046.85	55.18	H	27.79	-34.51	48.46	-97.41	-48.95	-13	35.95
2 046.69	60.13	V	27.79	-34.51	53.41	-97.41	-44.00	-13	31.00
Above 2 100.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (680.5 MHz)									
1 109.40	53.35	H	24.74	-38.21	39.88	-97.41	-57.53	-13	44.53
1 109.80	50.58	V	24.74	-38.21	37.11	-97.41	-60.30	-13	47.30
1 379.63	51.51	H	25.06	-37.58	38.99	-97.41	-58.42	-13	45.42
1 379.46	47.49	V	25.06	-37.58	34.97	-97.41	-62.44	-13	49.44
2 069.35	56.23	H	27.84	-34.13	49.94	-97.41	-47.47	-13	34.47
2 069.30	61.57	V	27.84	-34.13	55.28	-97.41	-42.13	-13	29.13
Above 2 100.00	Not detected	-	-	-	-	-	-	-	-
High Channel (688.0 MHz)									
1 108.65	52.89	H	24.73	-38.23	39.39	-97.41	-58.02	-13	45.02
1 109.40	50.20	V	24.74	-38.21	36.73	-97.41	-60.68	-13	47.68
1 394.58	49.71	H	25.09	-37.49	37.31	-97.41	-60.10	-13	47.10
1 394.55	46.97	V	25.09	-37.49	34.57	-97.41	-62.84	-13	49.84
2 091.85	57.56	H	27.88	-33.77	51.67	-97.41	-45.74	-13	32.74
2 091.79	62.20	V	27.88	-33.77	56.31	-97.41	-41.10	-13	28.10
Above 2 100.00	Not detected	-	-	-	-	-	-	-	-

- Ant. 3_Below 3 GHz

NR Band 25/2 (40 MHz - DFT-S-OFDM 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 (1 870.0 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (1 882.5 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-
High Channel (1 895.0 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-



NR Band 5 (20 MHz - DFT-S-OFDM 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 (834.0 MHz)									
1 332.86	48.48	H	25.03	-36.63	36.88	-97.41	-60.53	-13	47.53
1 332.86	48.32	V	25.03	-36.63	36.72	-97.41	-60.69	-13	47.69
1 649.40	53.11	H	25.80	-36.61	42.30	-97.41	-55.11	-13	42.11
1 649.37	51.24	V	25.79	-36.61	40.42	-97.41	-56.99	-13	43.99
2 474.30	47.46	H	28.30	-33.01	42.75	-97.41	-54.66	-13	41.66
2 474.08	48.45	V	28.30	-33.02	43.73	-97.41	-53.68	-13	40.68
Above 2 500.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (836.5 MHz)									
1 333.07	49.12	H	25.03	-36.64	37.51	-97.41	-59.90	-13	46.90
1 333.28	48.40	V	25.03	-36.64	36.79	-97.41	-60.62	-13	47.62
1 654.50	52.29	H	25.88	-36.53	41.64	-97.41	-55.77	-13	42.77
1 654.52	51.35	V	25.88	-36.53	40.70	-97.41	-56.71	-13	43.71
2 481.98	47.45	H	28.33	-33.38	42.40	-97.41	-55.01	-13	42.01
2 481.72	48.95	V	28.33	-33.36	43.92	-97.41	-53.49	-13	40.49
Above 2 500.00	Not detected	-	-	-	-	-	-	-	-
High Channel (839.0 MHz)									
1 333.04	49.56	H	25.03	-36.63	37.96	-97.41	-59.45	-13	46.45
1 333.06	49.68	V	25.03	-36.63	38.08	-97.41	-59.33	-13	46.33
1 659.37	52.03	H	25.97	-36.45	41.55	-97.41	-55.86	-13	42.86
1 659.45	51.28	V	25.97	-36.45	40.80	-97.41	-56.61	-13	43.61
2 489.02	48.05	H	28.36	-33.78	42.63	-97.41	-54.78	-13	41.78
2 489.26	48.33	V	28.36	-33.80	42.89	-97.41	-54.52	-13	41.52
Above 2 500.00	Not detected	-	-	-	-	-	-	-	-

NR Band 7 (20 MHz - DFT-S-OFDM BPSK)

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)									
7 502.10	40.48	H	36.10	-27.35	49.23	-95.26	-46.03	-25	21.03
7 502.08	39.48	V	36.10	-27.35	48.23	-95.26	-47.03	-25	22.03
Above 7 600.00	Not detected	—	—	—	—	—	—	—	—
Middle Channel (2 535.0 MHz)									
7 577.07	39.22	H	36.00	-27.43	47.79	-95.26	-47.47	-25	22.47
7 577.24	39.90	V	36.00	-27.43	48.47	-95.26	-46.79	-25	21.79
Above 7 600.00	Not detected	—	—	—	—	—	—	—	—
High Channel (2 560.0 MHz)									
7 652.15	30.73	H	36.00	-27.27	39.46	-95.26	-55.80	-25	30.80
7 652.28	35.81	V	36.00	-27.27	44.54	-95.26	-50.72	-25	25.72
Above 7 700.00	Not detected	—	—	—	—	—	—	—	—

NR Band 12 (15 MHz - DFT-S-OFDM 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 (706.5 MHz)									
1 332.80	51.32	H	25.03	-36.62	39.73	-97.41	-57.68	-13	44.68
1 333.03	51.48	V	25.03	-36.63	39.88	-97.41	-57.53	-13	44.53
1 399.36	61.10	H	25.10	-37.45	48.75	-97.41	-48.66	-13	35.66
1 399.32	64.44	V	25.10	-37.45	52.09	-97.41	-45.32	-13	32.32
2 098.92	59.09	H	27.90	-33.67	53.32	-97.41	-44.09	-13	31.09
2 099.05	51.92	V	27.90	-33.67	46.15	-97.41	-51.26	-13	38.26
Above 2 100.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (707.5 MHz)									
1 333.11	50.47	H	25.03	-36.64	38.86	-97.41	-58.55	-13	45.55
1 333.12	52.42	V	25.03	-36.64	40.81	-97.41	-56.60	-13	43.60
1 401.24	61.47	H	25.10	-37.45	49.12	-97.41	-48.29	-13	35.29
1 401.32	64.68	V	25.10	-37.45	52.33	-97.41	-45.08	-13	32.08
2 102.02	59.33	H	27.89	-33.70	53.52	-97.41	-43.89	-13	30.89
2 101.89	52.88	V	27.89	-33.69	47.08	-97.41	-50.33	-13	37.33
Above 2 200.00	Not detected	-	-	-	-	-	-	-	-
High Channel (708.5 MHz)									
1 332.77	51.50	H	25.03	-36.62	39.91	-97.41	-57.50	-13	44.50
1 332.93	52.91	V	25.03	-36.63	41.31	-97.41	-56.10	-13	43.10
1 403.29	61.02	H	25.11	-37.44	48.69	-97.41	-48.72	-13	35.72
1 403.24	65.34	V	25.11	-37.44	53.01	-97.41	-44.40	-13	31.40
2 104.84	59.39	H	27.87	-33.75	53.51	-97.41	-43.90	-13	30.90
2 104.95	54.18	V	27.87	-33.75	48.30	-97.41	-49.11	-13	36.11
Above 2 200.00	Not detected	-	-	-	-	-	-	-	-

NR Band 66 (20 MHz - DFT-S-OFDM BPSK)

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 (1 720.0 MHz)									
3 421.61	54.72	H	31.00	-31.39	54.33	-95.26	-40.93	-13	27.93
3 421.54	50.84	V	31.00	-31.39	50.45	-95.26	-44.81	-13	31.81
Above 3 500.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (1 745.0 MHz)									
3 451.67	45.97	H	31.00	-32.33	44.64	-95.26	-50.62	-13	37.62
3 451.62	43.15	V	31.00	-32.33	41.82	-95.26	-53.44	-13	40.44
Above 3 500.00	Not detected	-	-	-	-	-	-	-	-
High Channel (1 770.0 MHz)									
3 481.74	42.99	H	31.06	-32.46	41.59	-95.26	-53.67	-13	40.67
3 481.68	41.73	V	31.06	-32.46	40.33	-95.26	-54.93	-13	41.93
Above 3 500.00	Not detected	-	-	-	-	-	-	-	-

NR Band 71 (20 MHz - DFT-S-OFDM QPSK)

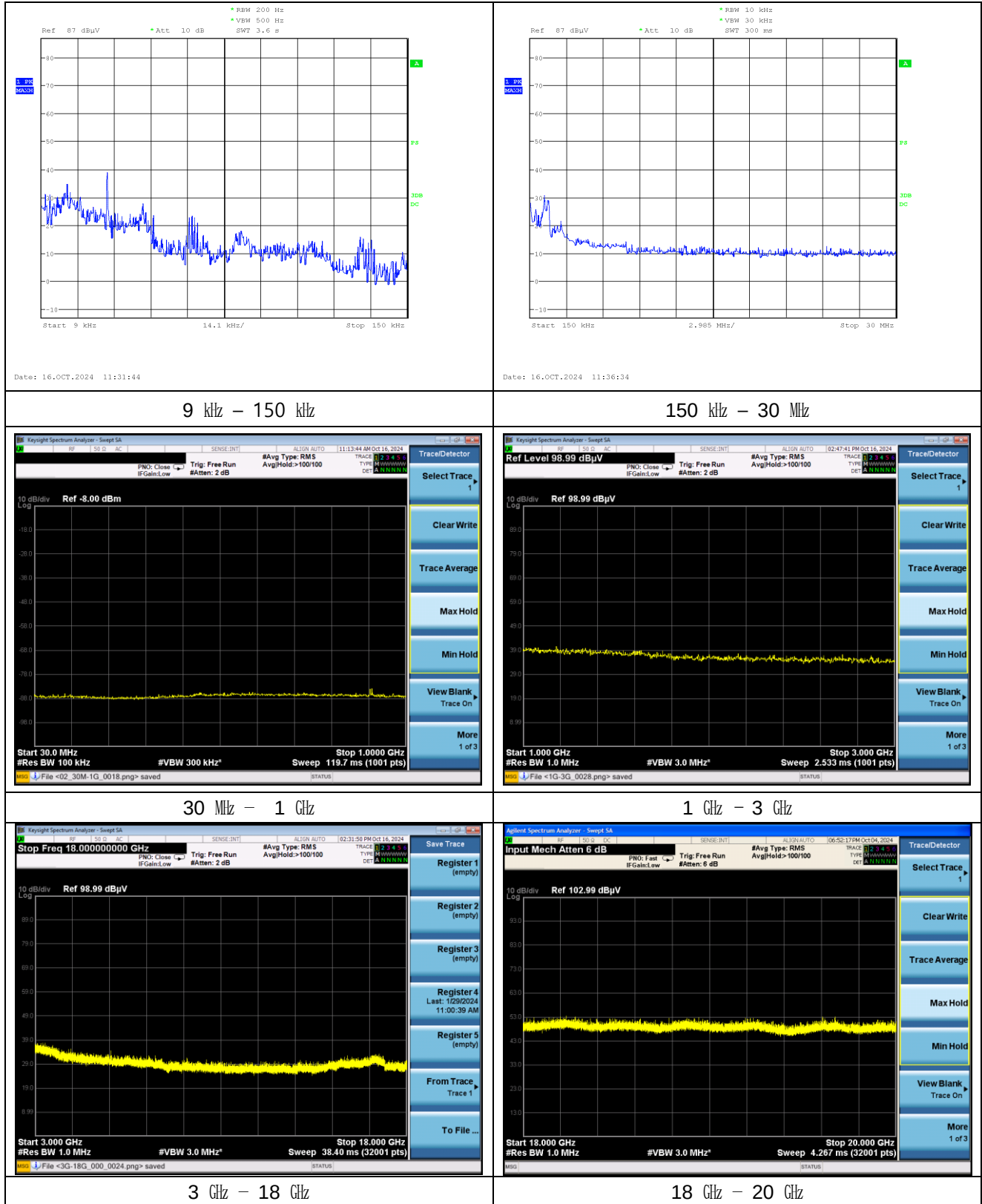
Frequency (MHz)	Measured Level (dBμV)	Ant. Pol.	AF (dB/m)	AMP+CL (dB)	E (dBμV/m)	CF (dB)	E.R.P. (dB m)	Limit (dB m)	Margin (dB)
Low Channel (673.0 MHz)									
1 333.12	45.78	H	25.03	-36.64	34.17	-97.41	-63.24	-13	50.24
1 333.05	48.08	V	25.03	-36.63	36.48	-97.41	-60.93	-13	47.93
1 364.47	53.03	H	25.03	-37.49	40.57	-97.41	-56.84	-13	43.84
1 364.69	55.26	V	25.03	-37.49	42.80	-97.41	-54.61	-13	41.61
2 046.77	63.05	H	27.79	-34.51	56.33	-97.41	-41.08	-13	28.08
2 046.79	58.93	V	27.79	-34.51	52.21	-97.41	-45.20	-13	32.20
Above 2 100.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (680.5 MHz)									
1 333.03	46.26	H	25.03	-36.63	34.66	-97.41	-62.75	-13	49.75
1 332.60	48.98	V	25.03	-36.62	37.39	-97.41	-60.02	-13	47.02
1 379.52	53.28	H	25.06	-37.58	40.76	-97.41	-56.65	-13	43.65
1 379.60	59.56	V	25.06	-37.58	47.04	-97.41	-50.37	-13	37.37
2 069.29	61.57	H	27.84	-34.13	55.28	-97.41	-42.13	-13	29.13
2 069.10	56.57	V	27.84	-34.13	50.28	-97.41	-47.13	-13	34.13
Above 2 100.00	Not detected	-	-	-	-	-	-	-	-
High Channel (688.0 MHz)									
1 333.11	48.69	H	25.03	-36.64	37.08	-97.41	-60.33	-13	47.33
1 332.88	49.14	V	25.03	-36.63	37.54	-97.41	-59.87	-13	46.87
1 394.35	51.32	H	25.09	-37.49	38.92	-97.41	-58.49	-13	45.49
1 394.51	61.34	V	25.09	-37.49	48.94	-97.41	-48.47	-13	35.47
2 091.83	60.07	H	27.88	-33.77	54.18	-97.41	-43.23	-13	30.23
2 091.87	53.29	V	27.88	-33.77	47.40	-97.41	-50.01	-13	37.01
Above 2 100.00	Not detected	-	-	-	-	-	-	-	-

ENDC

- Ant. 1 Below 3 GHz

5A-n2A (40 MHz - DFT-S-OFDM 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 (1 870.0 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (1 880.0 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-
High Channel (1 890.0 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-

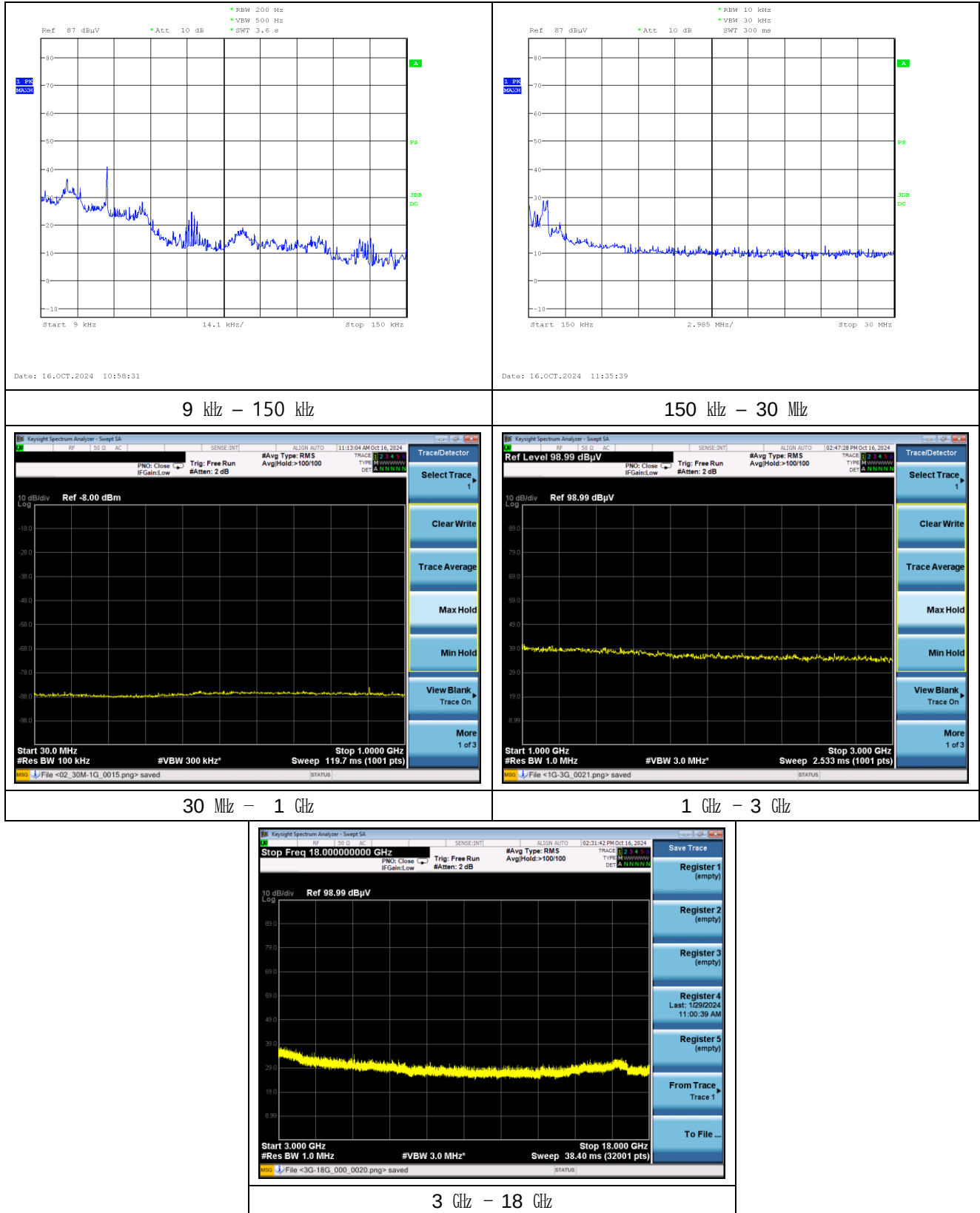


66A-n5A (20 MHz - DFT-S-OFDM QPSK)

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 (834.0 MHz)									
2 474.12	49.92	H	28.30	-33.02	45.20	-97.41	-52.21	-13	39.21
2 474.15	54.92	V	28.30	-33.02	50.20	-97.41	-47.21	-13	34.21
Above 2 500.00	Not detected	—	—	—	—	—	—	—	—
Middle Channel (836.5 MHz)									
2 481.76	50.77	H	28.33	-33.37	45.73	-97.41	-51.68	-13	38.68
2 481.69	53.75	V	28.33	-33.36	48.72	-97.41	-48.69	-13	35.69
Above 2 500.00	Not detected	—	—	—	—	—	—	—	—
High Channel (839.0 MHz)									
2 489.16	48.64	H	28.36	-33.79	43.21	-97.41	-54.20	-13	41.20
2 489.18	53.05	V	28.36	-33.79	47.62	-97.41	-49.79	-13	36.79
Above 2 500.00	Not detected	—	—	—	—	—	—	—	—

5A-n66A (20 MHz - DFT-S-OFDM BPSK)

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 (1 720.0 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (1 745.0 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-
High Channel (1 770.0 MHz)									
Below 1 000.00	Not detected	-	-	-	-	-	-	-	-
Above 1 000.00	Not detected	-	-	-	-	-	-	-	-



66A-n71A (20 MHz - DFT-S-OFDM 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 (673.0 MHz)									
2 046.79	61.95	H	27.79	-34.51	55.23	-97.41	-42.18	-13	29.18
2 046.84	61.90	V	27.79	-34.51	55.18	-97.41	-42.23	-13	29.23
Above 2 100.00	Not detected	-	-	-	-	-	-	-	-
Middle Channel (707.5 MHz)									
2 069.25	60.79	H	27.84	-34.13	54.50	-97.41	-42.91	-13	29.91
2 069.33	61.48	V	27.84	-34.13	55.19	-97.41	-42.22	-13	29.22
Above 2 100.00	Not detected	-	-	-	-	-	-	-	-
High Channel (688.0 MHz)									
2 091.72	61.07	H	27.88	-33.77	55.18	-97.41	-42.23	-13	29.23
2 091.82	61.17	V	27.88	-33.77	55.28	-97.41	-42.13	-13	29.13
Above 2 100.00	Not detected	-	-	-	-	-	-	-	-

- Ant. 3_Below 3 GHz

5A-n2A (40 MHz - DFT-S-OFDM 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 (1 870.0 MHz)									
Below 1 000.00	Not detected	–	–	–	–	–	–	–	–
Above 1 000.00	Not detected	–	–	–	–	–	–	–	–
Middle Channel (1 880.0 MHz)									
Below 1 000.00	Not detected	–	–	–	–	–	–	–	–
Above 1 000.00	Not detected	–	–	–	–	–	–	–	–
High Channel (1 890.0 MHz)									
Below 1 000.00	Not detected	–	–	–	–	–	–	–	–
Above 1 000.00	Not detected	–	–	–	–	–	–	–	–