FCC RADIO TEST REPORT

FCC ID	:	**LHJ-FE5NA0010**
Equipment	:	**FE5NA0010, FE5NA0011**
Brand Name	:	**Continental**
Model Name	:	**FE5NA0010, FE5NA0011**
Applicant	:	**Continental Automotive Systems, Inc. 21440 W Lake Cook Rd., Deer Park, IL 60010, USA**
Manufacturer	:	**Continental Automotive Systems, Inc. 21440 W Lake Cook Rd., Deer Park, IL 60010, USA**
Standard	:	**FCC 47 CFR Part 2, 22(H), 27**

The product was received on Apr. 11, 2024 and testing was performed from Apr. 23, 2024 to May 11, 2024. We, Sporton International (USA) Inc., would like to declare that the tested sample has been evaluated in accordance with the test procedures given in ANSI / TIA-603-E and has been in compliance with the applicable technical standards.

The test results in this partial report apply exclusively to the tested model / sample. Without written approval from Sporton International (USA) Inc., the test report shall not be reproduced except in full.

Neil Kao

Approved by: Neil Kao

Sporton International (USA) Inc.
1175 Montague Expressway, Milpitas, CA 95035

Table of Contents

History of this test report

Report No.	Version	Description	Issue Date
FG240325001C	01	Initial issue of report	May 14, 2024
FG240325001C	02	Revise Summary remark and Test Results of Radiated Test This report is an updated version, replacing the report issued on May 14, 2024.	May 15, 2024

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1053 §22.917 (a) §27.53 (h) §27.53 (l)(2)	Radiated Spurious Emission (n5) (n66) (n77)	Pass	31.72 dB under the limit at 7682.00 MHz

Conformity Assessment Condition:
1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account. 2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”.
Disclaimer:
The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	FE5NA0010, FE5NA0011
Brand Name	Continental
Model Name	FE5NA0010, FE5NA0011
FCC ID	LHJ-FE5NA0010
Installed into the Host	Equipment name: G12N510G1, G12N500G1 Brand name: Continental Model name: G12N510G1, G12N500G1
EUT supports Radios application	WCDMA/HSPA/LTE/5G NR/GNSS
EUT Stage	Identical Prototype

Sample Information			
Sample	**TA-code**	**L2/L5 GNSS**	**Band Difference**
1	FE5NA0010	Support	/
2	FE5NA0011	Not Support	BOM change: depopulated passive components from the GNSS RF front-end

Remark: The above EUT's information was declared by manufacturer.

Support Band and Evaluated Information	
Supported Band	n5, n66, n77
Supported Band	n5, n66, n77

1.2 Product Specification of Equipment Under Test

Product Specification is subject to this standard	
Tx Frequency	5G NR n5: 826.5 MHz ~ 846.5 MHz 5G NR n66: 1712.5 MHz ~ 1777.5 MHz 5G NR n77: 3710.01 MHz ~ 3969.99 MHz
Rx Frequency	5G NR n5: 871.5 MHz ~ 891.5 MHz 5G NR n66: 2112.5 MHz ~ 2197.5 MHz 5G NR n77: 3710.01 MHz ~ 3969.99 MHz
Bandwidth	5G NR n5: 20MHz 5G NR n66: 20MHz 5G NR n77: 100MHz
Antenna Type	**<Internal Antenna>:** TCP Antenna **<External Glass Antenna (Composed by component PN: 85038208, 85038209, 85038210, 85732934)>:** Glass Antenna
Antenna Gain	**<Internal Antenna>:** **Primary cell antenna:** 5G NR n5: 4.69 dBi 5G NR n66: 4.86 dBi 5G NR n77: 8.37 dBi **Secondary cell antenna:** 5G NR n77: 7.33 dBi **<External Glass Antenna (Composed by component PN: 85038208, 85038209, 85038210, 85732934)>:** **Primary cell antenna:** 5G NR n5: 2.72 dBi 5G NR n66: 5.07 dBi 5G NR n77: 2.12 dBi **Secondary cell antenna:** 5G NR n77: 2.57 dBi
Type of Modulation	PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

Remark:

1. The EUT's information above is declared by manufacturer. Please refer to Disclaimer in report summary.
2. For 5G NR n77, Primary cell antenna is only available in MIMO mode.

1.3 Modification of EUT

No modifications made to the EUT during the testing.

1.4 Testing Location

Test Site	Sporton International (USA) Inc.
Test Site Location	1175 Montague Expressway, Milpitas, CA 95035 TEL : 408 9043300
Test Site No.	**Sporton Site No.**
	03CH01-CA
Test Engineer	Howard Huang and Leo Liu
Temperature (℃)	20.5~23.2
Relative Humidity (%)	39.9~64.5

Note: The test site complies with ANSI C63.4 2014 requirement.

FCC Designation No.: US1250

1.5 Applicable Standards

According to the specifications declared by the manufacturer, the EUT must comply with the requirements of the following standards:

- ANSI C63.26-2015
- ANSI / TIA-603-E
- FCC 47 CFR Part 2, 22(H), 27
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB 414788 D01 Radiated Test Site v01r01.

Remark:

1. All the test items were validated and recorded in accordance with the standards without any modification during the testing.
2. The TAF code is not including all the FCC KDB listed without accreditation.

2 Test Configuration of Equipment Under Test

2.1 Test Mode

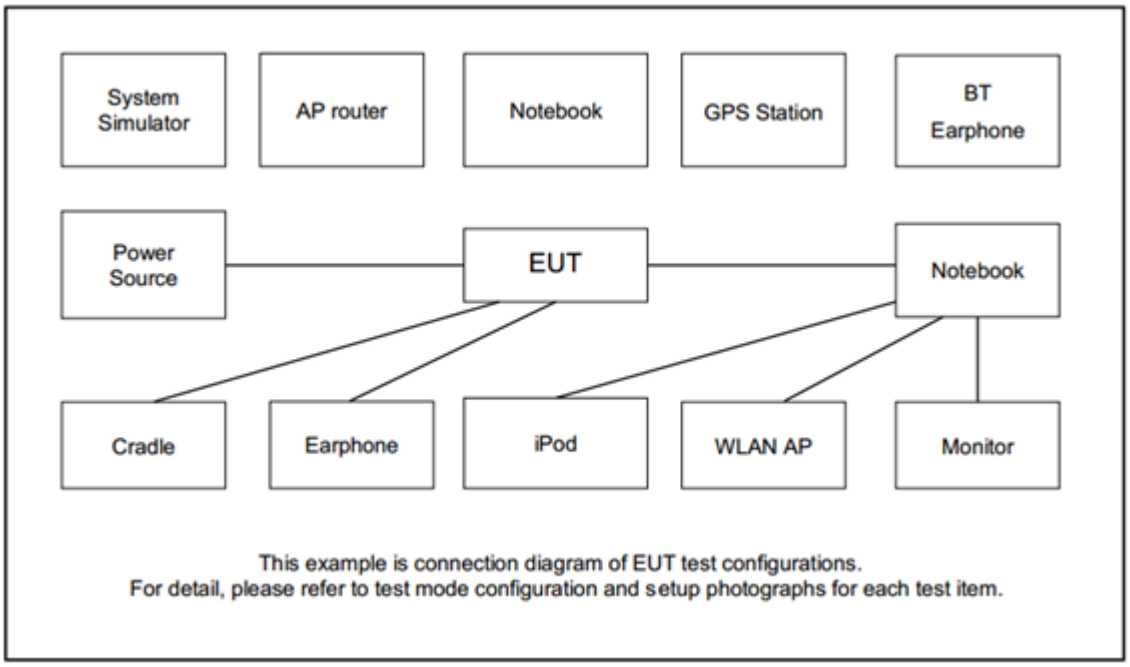
Antenna port conducted and radiated test items listed below are performed according to KDB 971168 D01 Power Meas. License Digital Systems v03r01 with maximum output power.

Modulation Type	Modulation	Modulation Type	Modulation
A	DFT-s-OFDM pi/2 BPSK	N/A	N/A
B	DFT-s-OFDM QPSK	F	CP-OFDM QPSK
C	DFT-s-OFDM 16QAM	G	CP-OFDM 16QAM
D	DFT-s-OFDM 64QAM	H	CP-OFDM 64QAM
E	DFT-s-OFDM 256QAM	I	CP-OFDM 256QAM

Test Item	Modulation Type	Bandwidth	RB Size	Channel
RSE	A, B	100 MHz or less	Inner_1RB	M

Remark:
1. Evaluated all the transmitter signal and reporting worst-case configuration among all modulation types.
2. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst-case emissions are reported.
3. For 5G NR test combination are EN-DC 2A_n5A and EN-DC 2A_n77A.
4. All the radiated test cases were performed with Sample 1.

2.2 Connection Diagram of Test System



2.3 Support Unit used in test configuration and system

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8821C	N/A	N/A	N/A
2.	System Simulator	Keysight	UXM	N/A	N/A	N/A

2.4 Frequency List of Low/Middle/High Channels

5G NR n5 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	166800	167300	167800
	Frequency	834	836.5	839

5G NR n66 Channel and Frequency List				
BW [MHz]	**Channel/Frequency(MHz)**	**Lowest**	**Middle**	**Highest**
20	Channel	344000	349000	354000
	Frequency	1720	1745	1770

5G NR Band n77 Channel and Frequency List for SCS 30kHz				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
100	Channel	650000	656000	662000
	Frequency	3750	3840	3930

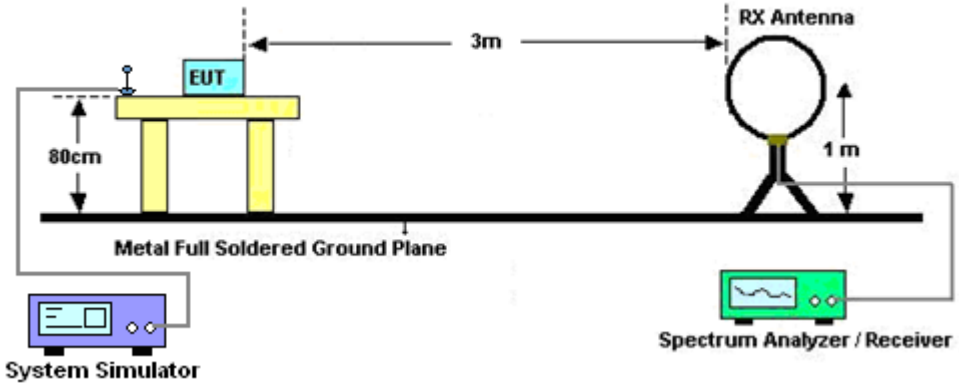
3 Radiated Test Items

3.1 Measuring Instruments

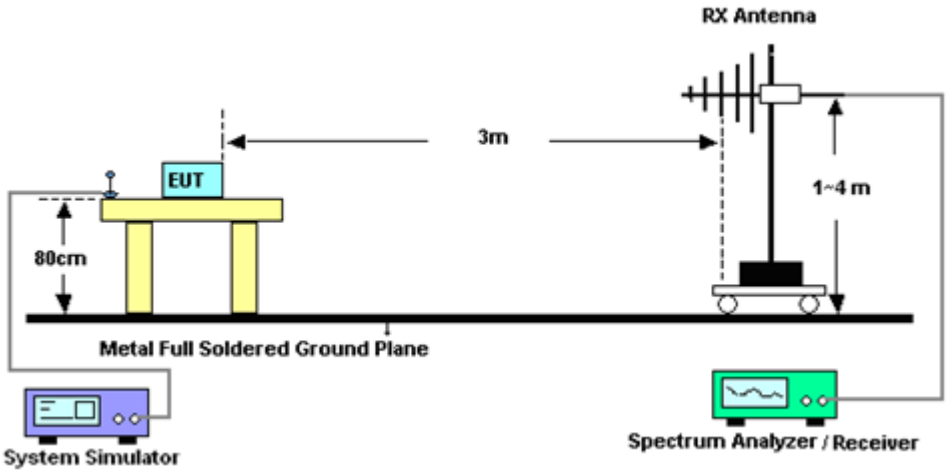
See list of measuring instruments of this test report.

3.1.1 Test Setup

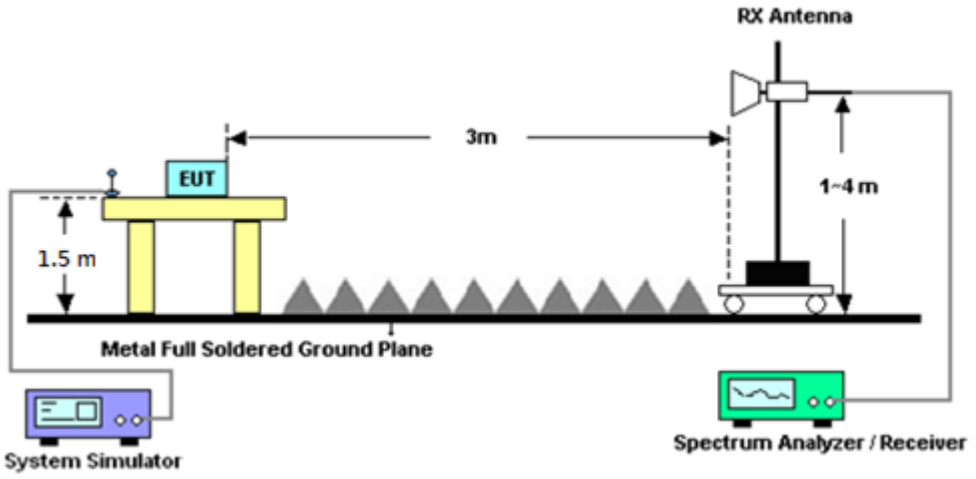
For radiated test below 30MHz



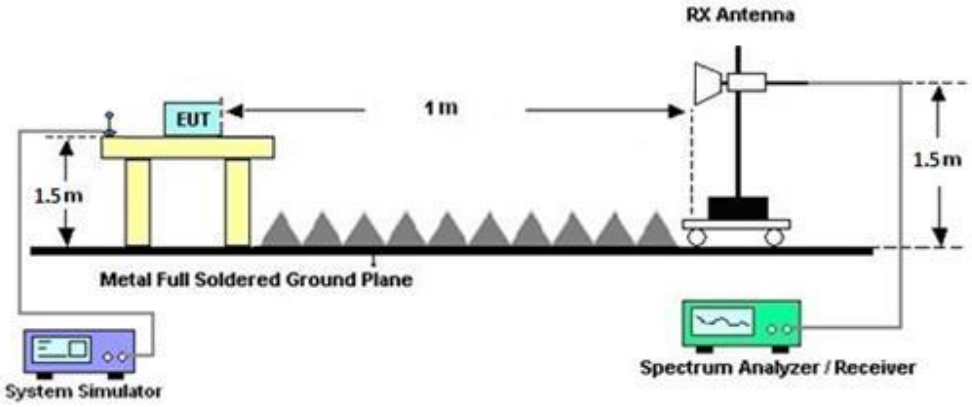
For radiated test from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



3.1.2 Test Result of Radiated Test

Please refer to Appendix A.

Note:

The low frequency, which started from 9 kHz to 30MHz, was pre-scanned and the result which was 20dB lower than the limit line was not reported.

There is adequate comparison measurement of both open-field test site and alternative test site - semi-Anechoic chamber according to 414788 D01 Radiated Test Site v01r01, and the result came out very similar.

3.2 Radiated Spurious Emission Measurement

3.2.1 Description of Radiated Spurious Emission Measurement

The radiated spurious emission was measured by substitution method according to ANSI / TIA-603-E. The power of any emission outside of the authorized operating frequency ranges must be attenuated below the transmitter power (P) by a factor of at least 43 + 10 log (P) dB

The spectrum is scanned from 30 MHz up to a frequency including its 10th harmonic.

3.2.2 Test Procedures

The testing follows FCC KDB 971168 D01 v03r01 Section 7 and ANSI C63.26-2015 section 5.5.4 Radiated measurement using the field strength method.

1. The EUT was placed on a turntable with 0.8 meter for frequency below 1GHz and 1.5 meter for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna, which was mounted on the antenna tower.
3. The table was rotated 360 degrees to determine the position of the highest spurious emission.
4. The height of the receiving antenna is varied between one meter and four meters to search the maximum spurious emission for both horizontal and vertical polarizations.
5. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
6. To convert spectrum reading E(dBuV/m) to EIRP(dBm)

   EIRP(dBm) = Level (dBuV/m) + 20log(d) -104.77,

   where d is the distance at which filed strength limit is specified in the rules
7. Field Strength Level (dBm) = Spectrum Reading (dBm) + Antenna Factor + Cable Loss + Read Level - Preamp Factor.
8. ERP (dBm) = EIRP (dBm) - 2.15
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Bilog Antenna	TESEQ	6111D	54683	30MHz~1GHz	Nov. 13, 2023	Apr. 23, 2024~ May 11, 2024	Nov. 12, 2024	Radiation (03CH01-CA)
Horn Antenna	SCHWARZBECK	BBHA 9120D	02115	1GHz~18GHz	Aug. 09, 2023	Apr. 23, 2024~ May 11, 2024	Aug. 08, 2024	Radiation (03CH01-CA)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00842	18GHz~40GHz	Jul. 17, 2023	Apr. 23, 2024~ Apr. 24, 2024	Jul. 16, 2024	Radiation (03CH01-CA)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00841	18GHz~40GHz	Aug. 22, 2023	May 10, 2024~ May 11, 2024	Aug. 21, 2024	Radiation (03CH01-CA)
Amplifier	SONOMA	310N	372241	N/A	May 03, 2023	Apr. 23, 2024~ Apr. 24, 2024	May 02, 2024	Radiation (03CH01-CA)
Amplifier	SONOMA	310N	372241	N/A	Apr. 24, 2024	May 10, 2024~ May 11, 2024	Apr. 23, 2025	Radiation (03CH01-CA)
Preamplifier	E-instrument	ERA-100M-18G-56-01-A70	C1900251	1GHz~18GHz	Jun. 27, 2023	Apr. 23, 2024~ Apr. 24, 2024	Jun. 26, 2024	Radiation (03CH01-CA)
Preamplifier	E-instrument	ERA-100M-18G-56-01-A70	EC1900252	1GHz~18GHz	Apr. 25, 2024	May 10, 2024~ May 11, 2024	Apr. 24, 2025	Radiation (03CH01-CA)
Preamplifier	EMEC	EMC18G40G	060725	18GHz-40GHz	May 04, 2023	Apr. 23, 2024~ Apr. 24, 2024	May 03, 2024	Radiation (03CH01-CA)
Preamplifier	EMEC	EMC18G40G	060725	18GHz-40GHz	Apr. 24, 2024	May 10, 2024~ May 11, 2024	Apr. 23, 2025	Radiation (03CH01-CA)
Preamplifier	Keysight	83017A	MY53270321	1GHz~18GHz	Apr. 25, 2024	May 10, 2024~ May 11, 2024	Apr. 24, 2025	Radiation (03CH01-CA)
EMI Test Receiver	R&S	ESU26	100049	20Hz~26.5GHz	May 02, 2023	Apr. 23, 2024~ Apr. 24, 2024	May 01, 2024	Radiation (03CH01-CA)
EMI Test Receiver	R&S	ESU26	100049	20Hz~26.5GHz	Apr. 25, 2024	May 10, 2024~ May 11, 2024	Apr. 24, 2025	Radiation (03CH01-CA)
Spectrum Analyzer	R&S	FSW43	104042	2Hz~43GHz	Dec. 22, 2023	Apr. 23, 2024~ Apr. 24, 2024	Dec. 21, 2024	Radiation (03CH01-CA)
Spectrum Analyzer	Keysight	N9010B	MY63440343	10Hz - 44GHz	Jan. 16, 2024	May 10, 2024~ May 11, 2024	Jan. 15, 2025	Radiation (03CH01-CA)
RF Cable	HUBER+SUHNER	SUCOFLEX 102	8015932/2, 8015762/2, 804938/2	N/A	Mar. 05, 2024	Apr. 23, 2024~ May 11, 2024	Mar. 04, 2025	Radiation (03CH01-CA)
Hygrometer	TESEO	608-H1	45142559	N/A	Aug. 30, 2023	Apr. 23, 2024~ May 11, 2024	Aug. 29, 2024	Radiation (03CH01-CA)
Controller	Chaintek	EM-1000	060881	Control Turn Table & Antenna Mast	N/A	Apr. 23, 2024~ May 11, 2024	N/A	Radiation (03CH01-CA)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Apr. 23, 2024~ May 11, 2024	N/A	Radiation (03CH01-CA)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Apr. 23, 2024~ May 11, 2024	N/A	Radiation (03CH01-CA)
Test Software	Audix E3	E6.2009-8-24d	PK-002093	N/A	N/A	Apr. 23, 2024~ Apr. 24, 2024	N/A	Radiation (03CH01-CA)
Test Software	Audix E3	E3 230621 Sporton US V9	PK-002093	N/A	N/A	May 10, 2024~ May 11, 2024	N/A	Radiation (03CH01-CA)

5 Measurement Uncertainty

Uncertainty of Radiated Emission Measurement (30 MHz ~ 1000 MHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.40 dB**

Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.60 dB**

Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**4.30 dB**

Appendix A. Test Results of Radiated Test

A1. Summary of each worse mode

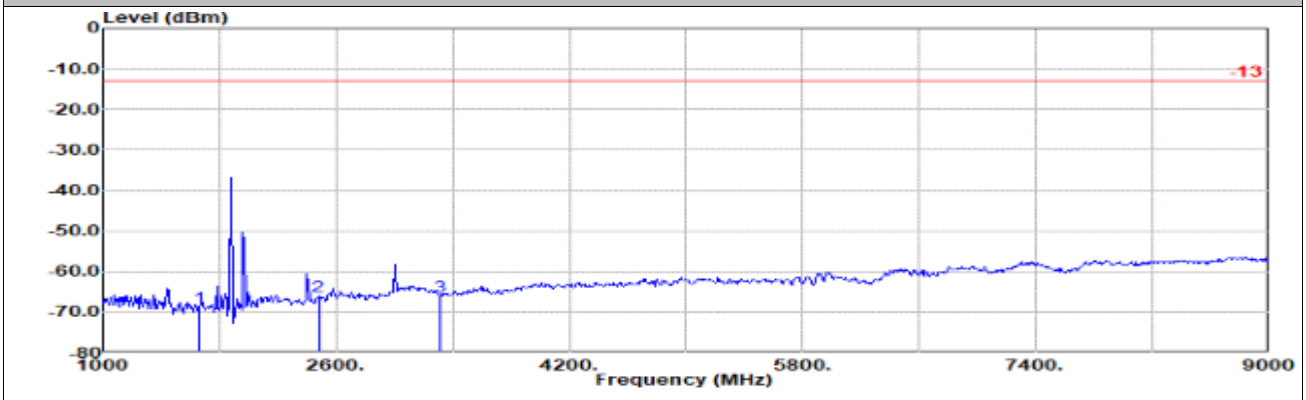
Mode	Part	Band	Ch	Freq (MHz)	Level (dBm)	Det	Ant Factor (dB)	Amp\Cbl (dB)	Filter (dB)	EIRPCF (dB)	Reading (dBuV)	Limit (dBm)	Margin (dB)	Pol	Ant
3	Part 22H	EN-DC B2+n5	M	3312	-65.92	RMS	29.55	-57.93	0.26	-95.23	57.43	-13.00	-52.92	V	Antenna-L246 Primary
1	Part 27O	SA-HPUE	M	7682	-46.06	RMS	36.40	-52.41	0.91	-95.23	64.27	-13.00	-33.06	V	Antenna-L246 Primary
2	Part 27O	MIMO	M	7682	-44.72	RMS	36.40	-52.41	0.91	-95.23	65.61	-13.00	-31.72	V	Antenna-L246 Primary
3	Part 27L	NR SA n66	M	5220	-54.00	RMS	32.98	-55.56	0.47	-95.23	63.34	-13.00	-41.00	V	Antenna-L246 Primary
1	Part 27	EN-DC B2+n77	M	15195	-55.93	RMS	39.15	-49.16	0.62	-95.23	48.69	-13.00	-42.93	V	Antenna-L246 Secondary

Antenna-L246 Primary

Part 22H Mode 3

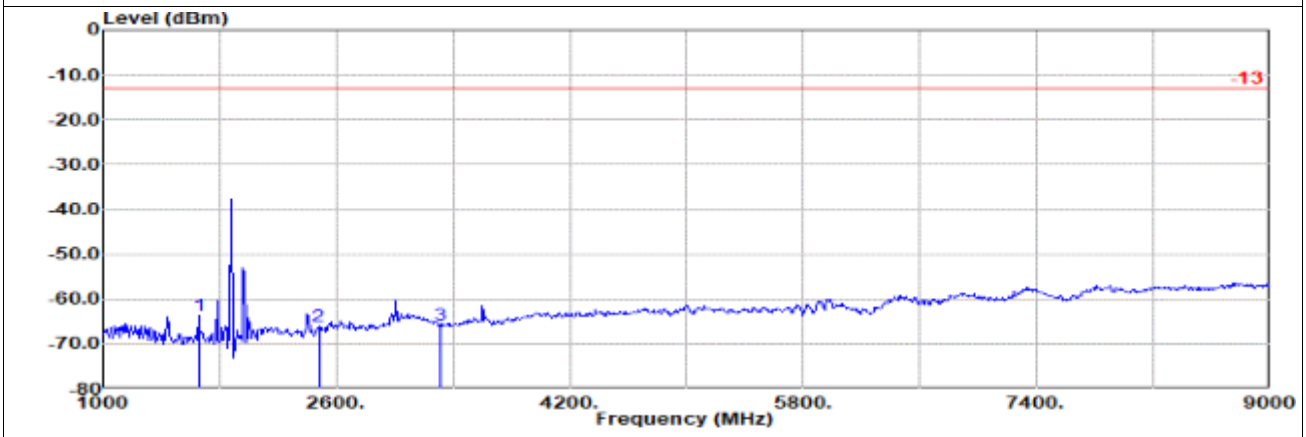
EN-DC B2+n5 10M + 20M Ch18900 1RB0 QPSK + Ch167300 1RB1 BPSK

M



Site : 03CH01-CA
Condition: -13 3m HORN_02115_230809 Horizontal
: ENDC B2+n5 Ch167300 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1656.00	-68.80	RMS	25.13	-61.27	0.47	-95.23	62.10	-13.00	-55.80	Horizontal
2	2480.00	-66.20	RMS	27.85	-59.80	0.30	-95.23	60.68	-13.00	-53.20	Horizontal
3	3312.00	-66.13	RMS	29.51	-57.93	0.26	-95.23	57.26	-13.00	-53.13	Horizontal



Site : 03CH01-CA
Condition: -13 3m HORN_02115_230809 Vertical
: ENDC B2+n5 Ch167300 1RB0 QPSK

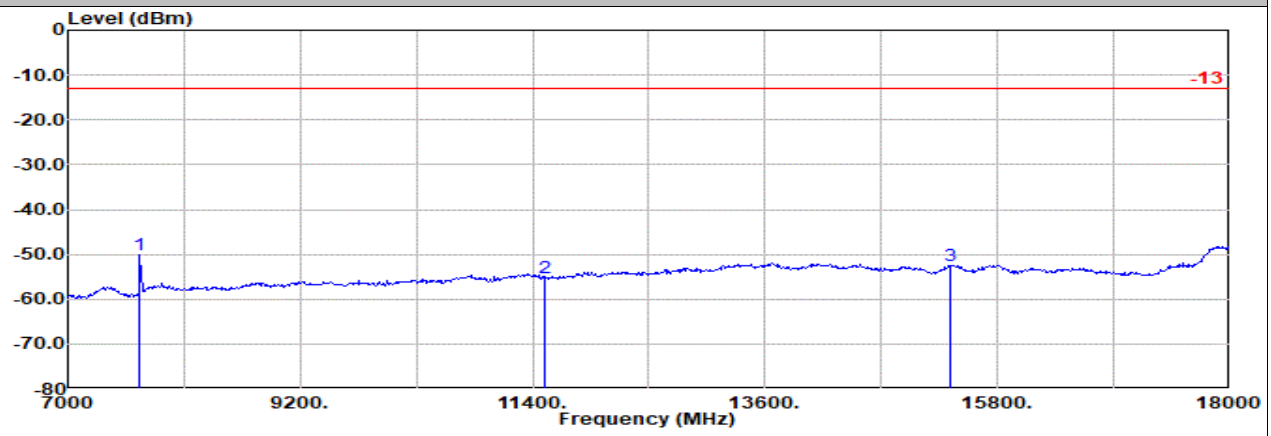
	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1656.00	-63.72	RMS	25.15	-61.27	0.47	-95.23	67.16	-13.00	-50.72	Vertical
2	2480.00	-66.07	RMS	27.69	-59.80	0.30	-95.23	60.97	-13.00	-53.07	Vertical
3	3312.00	-65.92	RMS	29.55	-57.93	0.26	-95.23	57.43	-13.00	-52.92	Vertical

Antenna-L246 Primary

Part 27O Mode 1

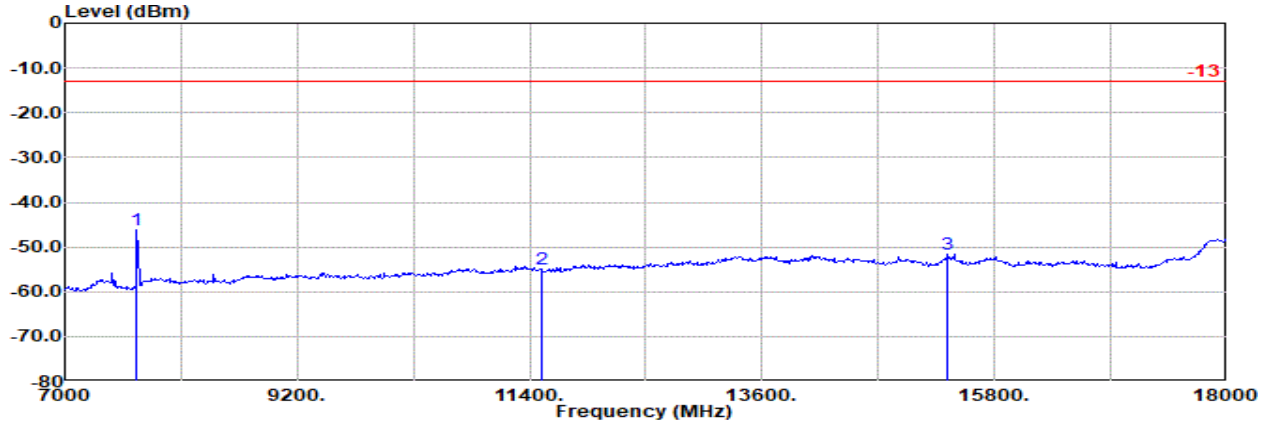
NR SA n77(SA-HPUE) 100M Ch656000 1RB1 BPSK

M



Site : 03CH01-CA
Condition: -13 3m HORN_02115_230809 Horizontal
: SA n77 100M Ch656000 1RB1 BPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7682.00	-50.13	RMS	36.44	-52.41	0.91	-95.23	60.16	-13.00	-37.13	Horizontal
2	11521.00	-55.38	RMS	39.08	-49.83	0.62	-95.23	49.98	-13.00	-42.38	Horizontal
3	15360.00	-52.63	RMS	38.99	-47.55	0.60	-95.23	50.56	-13.00	-39.63	Horizontal



Site : 03CH01-CA
Condition: -13 3m HORN_02115_230809 Vertical
: SA n77 100M Ch656000 1RB1 BPSK

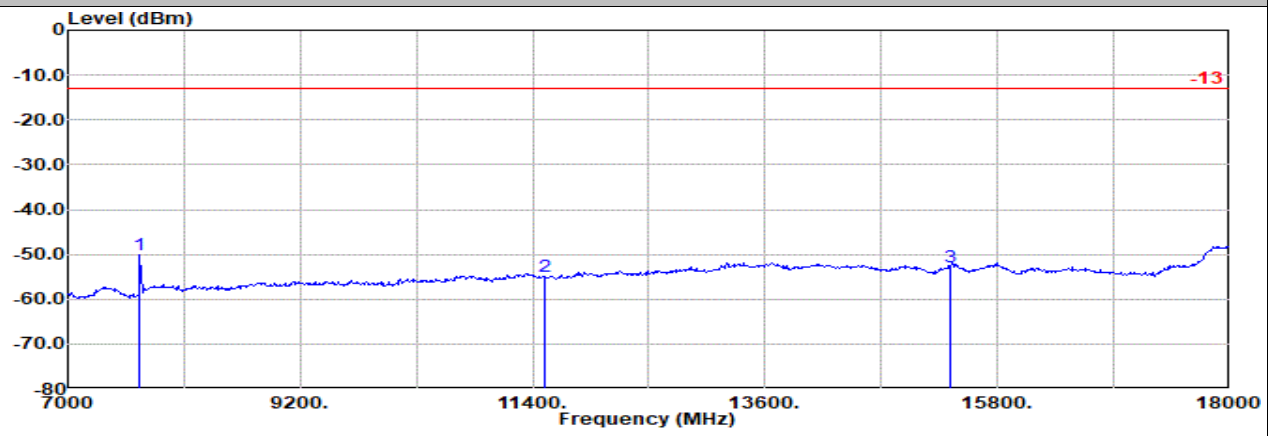
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7682.00	-46.06	RMS	36.40	-52.41	0.91	-95.23	64.27	-13.00	-33.06	Vertical
2	11521.00	-55.08	RMS	39.09	-49.83	0.62	-95.23	50.27	-13.00	-42.08	Vertical
3	15360.00	-51.50	RMS	38.96	-47.55	0.60	-95.23	51.72	-13.00	-38.50	Vertical

Antenna-L246 Primary

Part 27O Mode 2

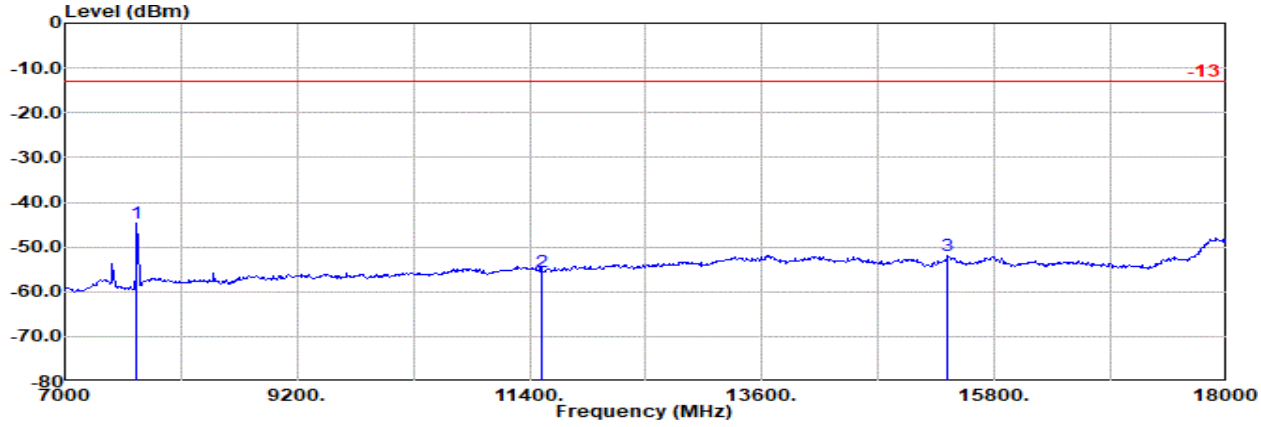
NR SA n77(MIMO) 100M Ch656000 1RB1 BPSK

M



Site : 03CH01-CA
Condition: -13 3m HORN_02115_230809 Horizontal
: SA n77 100M Ch656000 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7682.00	-50.09	RMS	36.44	-52.41	0.91	-95.23	60.20	-13.00	-37.09	Horizontal
2	11521.00	-54.88	RMS	39.08	-49.83	0.62	-95.23	50.48	-13.00	-41.88	Horizontal
3	15360.00	-52.73	RMS	38.99	-47.55	0.60	-95.23	50.46	-13.00	-39.73	Horizontal



Site : 03CH01-CA
Condition: -13 3m HORN_02115_230809 Vertical
: SA n77 100M Ch656000 1RB0 QPSK

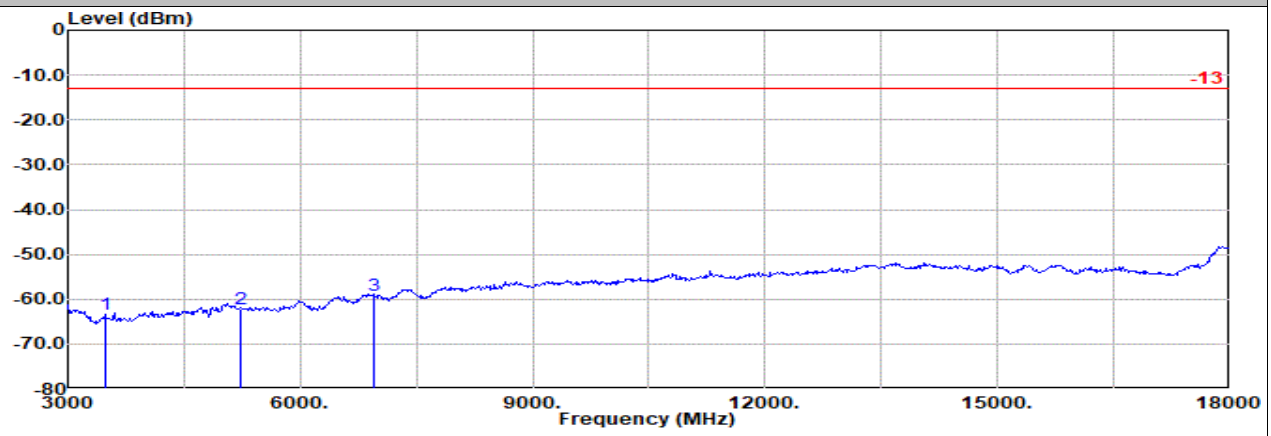
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7682.00	-44.72	RMS	36.40	-52.41	0.91	-95.23	65.61	-13.00	-31.72	Vertical
2	11521.00	-55.43	RMS	39.09	-49.83	0.62	-95.23	49.92	-13.00	-42.43	Vertical
3	15360.00	-51.87	RMS	38.96	-47.55	0.60	-95.23	51.35	-13.00	-38.87	Vertical

Antenna-L246 Primary

Part 27L Mode 3

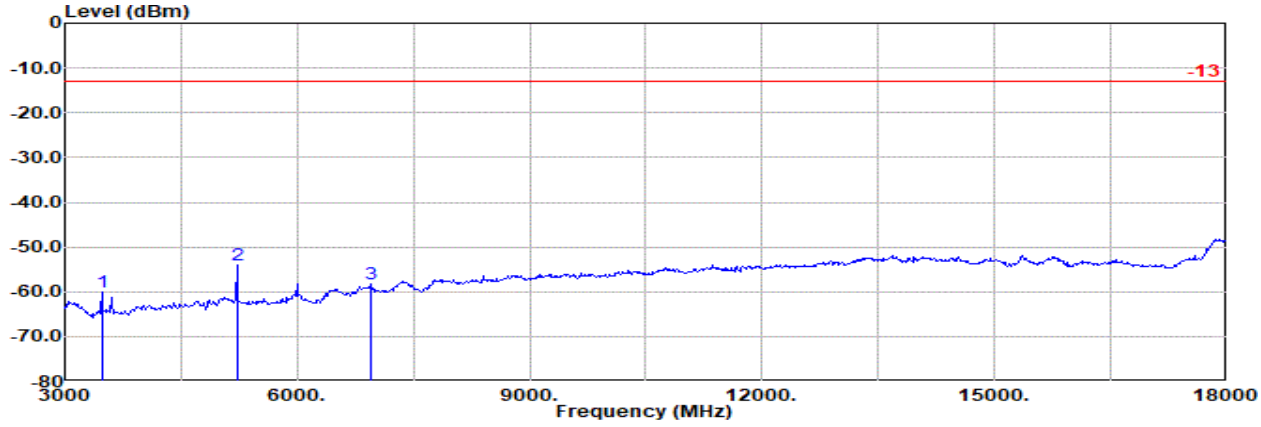
NR SA n66 20M Ch349000 1RB1 BPSK

M



Site : 03CH01-CA
Condition: -13 3m HORN_02115_230809 Horizontal
: NR SA n66 20M Ch349000 1RB1 BPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3480.00	-63.36	RMS	29.47	-57.71	0.98	-95.23	59.13	-13.00	-50.36	Horizontal
2	5220.00	-62.10	RMS	32.98	-55.56	0.47	-95.23	55.24	-13.00	-49.10	Horizontal
3	6945.00	-59.07	RMS	35.90	-52.59	0.34	-95.23	52.51	-13.00	-46.07	Horizontal



Site : 03CH01-CA
Condition: -13 3m HORN_02115_230809 Vertical
: NR SA n66 20M Ch349000 1RB1 BPSK

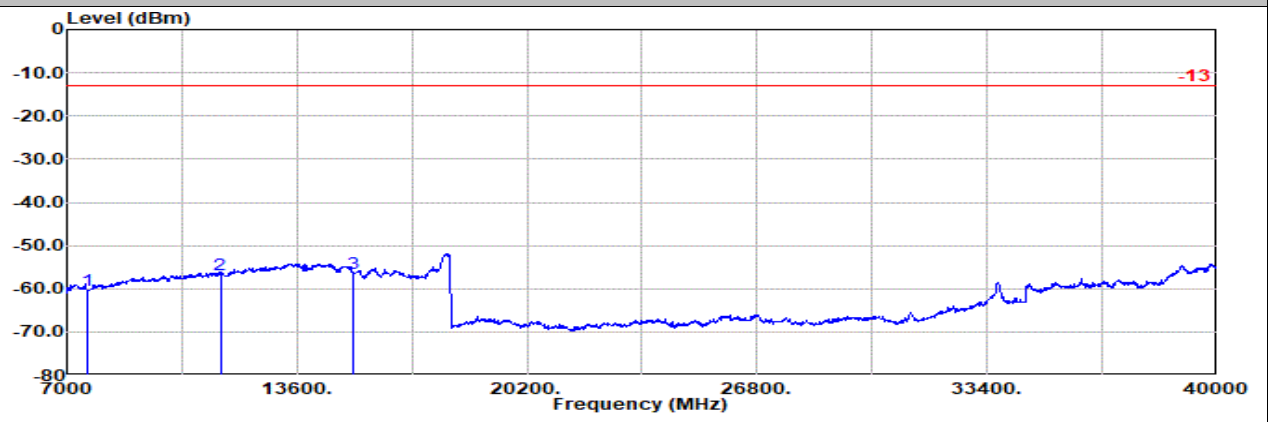
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3480.00	-59.93	RMS	29.55	-57.71	0.98	-95.23	62.48	-13.00	-46.93	Vertical
2	5220.00	-54.00	RMS	32.98	-55.56	0.47	-95.23	63.34	-13.00	-41.00	Vertical
3	6945.00	-58.37	RMS	35.96	-52.59	0.34	-95.23	53.15	-13.00	-45.37	Vertical

Antenna-L246 Secondary

Part 27O

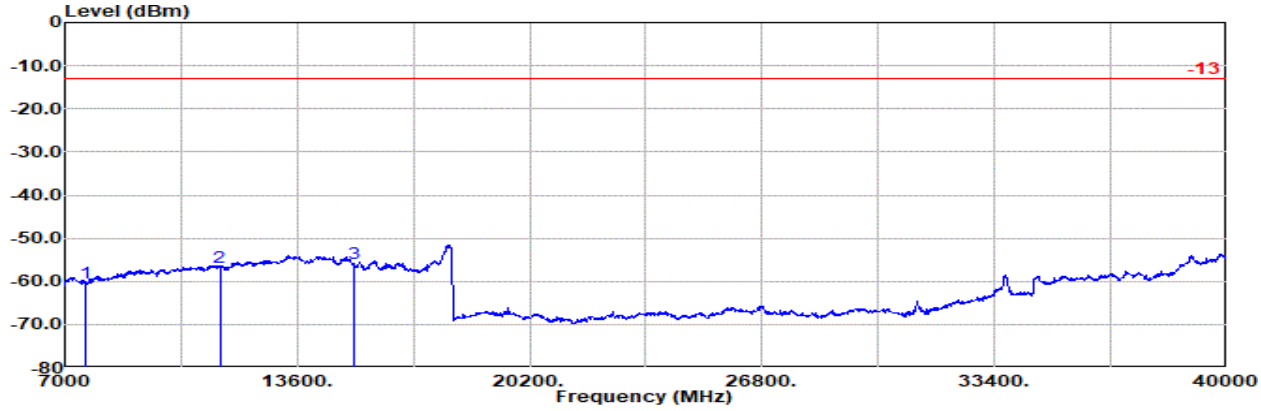
EN-DC B2+n77 20M + 100M Ch18900 1RB0 QPSK + Ch656000 1RB1 BPSK

M



Site : 03CH01-CA
Condition : -13 1m SHF_HORN_841_230822 Horizontal
Band2+n77 20M+100M :
Ch18900 1RB0 QPSK + Ch656000 1RB1 BPSK:

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7605.00	-60.38	RMS	36.34	-52.75	0.92	-95.23	50.34	-13.00	-47.38	Horizontal
2	11400.00	-56.80	RMS	39.31	-51.06	0.61	-95.23	49.57	-13.00	-43.80	Horizontal
3	15195.00	-56.58	RMS	39.18	-49.16	0.62	-95.23	48.01	-13.00	-43.58	Horizontal

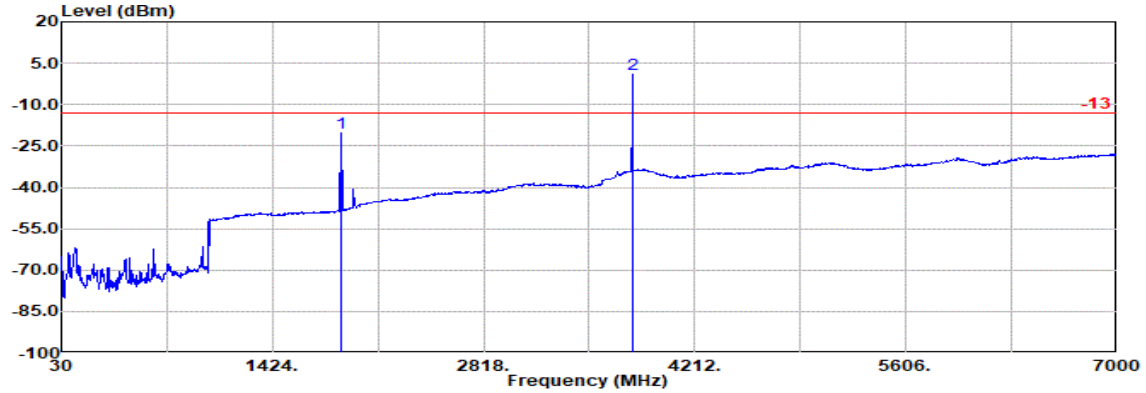


Site : 03CH01-CA
Condition : -13 1m SHF_HORN_841_230822 Vertical
Band2+n77 20M+100M :
Ch18900 1RB0 QPSK + Ch656000 1RB1 BPSK:

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7605.00	-60.37	RMS	36.31	-52.75	0.92	-95.23	50.38	-13.00	-47.37	Vertical
2	11400.00	-56.71	RMS	39.31	-51.06	0.61	-95.23	49.66	-13.00	-43.71	Vertical
3	15195.00	-55.93	RMS	39.15	-49.16	0.62	-95.23	48.69	-13.00	-42.93	Vertical

Antenna-L246 Secondary

Part 27O
EN-DC B2+n77 20M + 100M Ch18900 1RB0 QPSK + Ch656000 1RB1 BPSK
M

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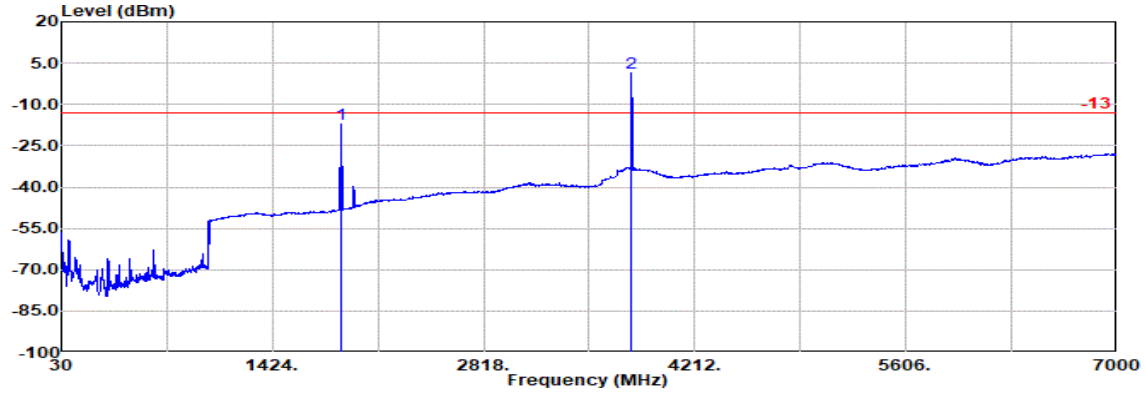
Site                                    : 03CH01-CA
Condition                               : -13 3m HORN_02115_230809 Horizontal
Band2+n77 20M+100M                      :
Ch18900 1RB0 QPSK + Ch656000 1RB1 BPSK:
                                        : #1 is fundamental signal which can be ignore
                                        : #2 is fundamental signal which can be ignore
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1876.00	-20.16	RMS	25.47	6.67	0.00	-95.23	42.93	-13.00	-7.16	Horizontal
2	3802.00	0.78	RMS	30.42	9.56	0.00	-95.23	56.03	-13.00	13.78	Horizontal

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Site                                    : 03CH01-CA
Condition                               : -13 3m HORN_02115_230809 Vertical
Band2+n77 20M+100M                      :
Ch18900 1RB0 QPSK + Ch656000 1RB1 BPSK:
                                        : #1 is fundamental signal which can be ignore
                                        : #2 is fundamental signal which can be ignore
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1876.00	-16.93	RMS	25.56	6.67	0.00	-95.23	46.07	-13.00	-3.93	Vertical
2	3796.00	1.52	RMS	30.33	9.55	0.00	-95.23	56.87	-13.00	14.52	Vertical

Remark: The over limit signal #2 is fundamental signal which can be ignored.