



FCC RADIO TEST REPORT

FCC ID : 2BEY3FCUN69M
Equipment : 5G Sub-6 GHz M.2 Module
Brand Name : NETPRISMA INC.
Model Name : FCUN69-WWD
Applicant : NETPRISMA INC.
1301 6TH AVE, SEATTLE, WA, 98101-2304, UNITED STATES
Manufacturer : Lenovo PC HK Limited
23/F, Lincoln House, Taikoo Place 979 King's Road, Quarry Bay,
Hong Kong, P.R. China
Standard : FCC 47 CFR Part 2, 96

Equipment: NETPRISMA INC. FCUN69-WWD tested inside of Lenovo Notebook Computer.

The product was received on Aug. 21, 2024 and testing was performed from Aug. 29, 2024 to Oct. 15, 2024. We, Sporton International Inc. EMC & Wireless Communications Laboratory, would like to declare that the tested sample has been evaluated in accordance with the test procedures 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 Inc. EMC & Wireless Communications Laboratory, the test report shall not be reproduced except in full.

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory



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History of this test report

Report No.	Version	Description	Issue Date
FG482037E	01	Initial issue of report	Nov. 18, 2024
FG482037E	02	1. Add Main Antenna in Appendix A 2. Revise Section 3.3.2 This report is an updated version, replacing the report issued on Nov. 18, 2024.	Nov. 27, 2024
FG482037E	03	Revise Section 2.1 This report is an updated version, replacing the report issued on Nov. 27, 2024.	Dec. 03, 2024

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Pass	-
-	§96.41	Peak-to-Average Ratio	Pass	See Note
3.3	§96.41	Effective Isotropic Radiated Power and EIRP PSD	Pass	-
-	§2.1049 §96.41	Occupied Bandwidth	Pass	See Note
-	§2.1051 §96.41	Conducted Band Edge Measurement	Pass	See Note
-	§2.1051 §96.41	Conducted Spurious Emission	Pass	See Note
-	§2.1055	Frequency Stability for Temperature & Voltage	Pass	See Note
4.4	§2.1051 §96.41	Radiated Spurious Emission	Pass	10.64 dB under the limit at 14205.00 MHz

Remark:

- For host device, Radiated Spurious Emission and Equivalent Isotropic Radiated Power are verified and complies with the limit in this test report.
- For host device, the Conducted Output Power is no difference after compared to module (Model: FCUN69-WWD)

Conformity Assessment Condition:

- 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/manufacture who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
- 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.

Reviewed by: Sheng Kuo
Report Producer: Rebecca Wu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	5G Sub-6 GHz M.2 Module
Brand Name	NETPRISMA INC.
Model Name	FCUN69-WWD
FCC ID	2BEY3FCUN69M
Sample 1	EUT with Host 1
Sample 2	EUT with Host 2
EUT supports Radios application	WCDMA/HSPA/LTE/5G NR/GNSS
EUT Stage	Production Unit

Remark:

1. The above EUT's information was declared by manufacturer.
2. Equipment: NETPRISMA INC. FCUN69-WWD tested inside of Lenovo Notebook Computer.

The product was installed into Notebook Computer (Brand Name: Lenovo, Model Name: TP00151B) during test, and the host information was recorded in the following table.

Host Information	
Host 1	Host with Amphenol Antenna
Host 2	Host with Speed Taiwan Corporation Antenna

Support band and evaluated information	
Supported band	n48
Evaluated and Tested band	n48

WWAN Antenna Information for Host				
Main Antenna	Manufacturer	Amphenol	Peak gain (dBi)	5GNR n48 : 1.00
	Part number	TKF436-16-000-R	Type	PIFA
	Manufacturer	Speed Taiwan Corporation	Peak gain (dBi)	5GNR n48 : 0.97
	Part number	F-0G-JV-0228-001-00	Type	PIFA
MIMO 2 Antenna	Manufacturer	Amphenol	Peak gain (dBi)	5GNR n48 : -1.49
	Part number	TKF114-16-000-R	Type	PIFA
	Manufacturer	Speed Taiwan Corporation	Peak gain (dBi)	5GNR n48 : -1.51
	Part number	F-0G-JV-0228-002-00	Type	PIFA
MIMO1 Antenna	Manufacturer	Amphenol	Peak gain (dBi)	5G NR n48: 1.00
	Part number	TKF436-16-000-R	Type	PIFA
	Manufacturer	Speed Taiwan Corporation	Peak gain (dBi)	5G NR n48: 0.97
	Part number	F-0G-JV-0228-001-00	Type	PIFA
Aux. Antenna	Manufacturer	Amphenol	Peak gain (dBi)	5G NR n48: -1.49
	Part number	TKF114-16-000-R	Type	PIFA
	Manufacturer	Speed Taiwan Corporation	Peak gain (dBi)	5G NR n48: -1.51
	Part number	F-0G-JV-0228-002-00	Type	PIFA

Remark: The above EUT's information was declared by manufacturer. Please refer to Disclaimer in report summary.

1.2 Product Specification of Equipment Under Test

Product Specification is subject to this standard	
Tx Frequency	3550 MHz ~ 3700 MHz
Rx Frequency	3550 MHz ~ 3700 MHz
Bandwidth	10 MHz / 15 MHz / 20 MHz / 30 MHz / 40 MHz
Maximum Output Power to Antenna	<SISO Mode>: <Main Antenna>: 20.68 dBm <MIMO2 Antenna>: 20.90 dBm <MIMO Mode>: <Main/MIMO2 Antenna>: 19.51 dBm <SRS Mode> <MIMO1 Antenna>: 17.91 dBm <Aux. Antenna>: 18.35 dBm
Type of Modulation	PI/2 BPSK / QPSK / 16QAM / 64QAM / 256QAM

1.3 Modification of EUT

No modifications are made to the EUT during all test items.

1.4 Testing Location

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333
Test Site No.	Sporton Site No. TH03-HY
Test Engineer	Jimmy Chang
Temperature (°C)	19.6~23.4
Relative Humidity (%)	49.8~58.6

Test Site	Sporton International Inc. Wensan Laboratory.
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010
Test Site No.	Sporton Site No. 03CH12-HY (TAF Code: 3786)
Test Engineer	Ken Kuo, Tim Lee, and Wilson Wu
Temperature (°C)	20~25
Relative Humidity (%)	50~60
Remark	The Radiated Spurious Emission test item subcontracted to Sporton International Inc. Wensan Laboratory.

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

FCC Designation No.: TW1190 and TW3786



1.5 Applied Standards

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

- ♦ ANSI C63.26-2015
- ♦ FCC 47 CFR Part 2, 96
- ♦ FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- ♦ FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP v01r01
- ♦ FCC KDB 414788 D01 Radiated Test Site v01r01
- ♦ FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Remark:

1. All test items were verified and recorded according to the standards and without any deviation during the test.
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.

For radiated measurement, the measured emission level of the EUT was maximized by rotating the EUT on a turntable, adjusting the orientation of the EUT and EUT antenna in Tablet Mode (three orthogonal axis (X: flat, Y: portrait, Z: landscape)) and Notebook Mode, and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and only the worst case emissions were reported in this report..

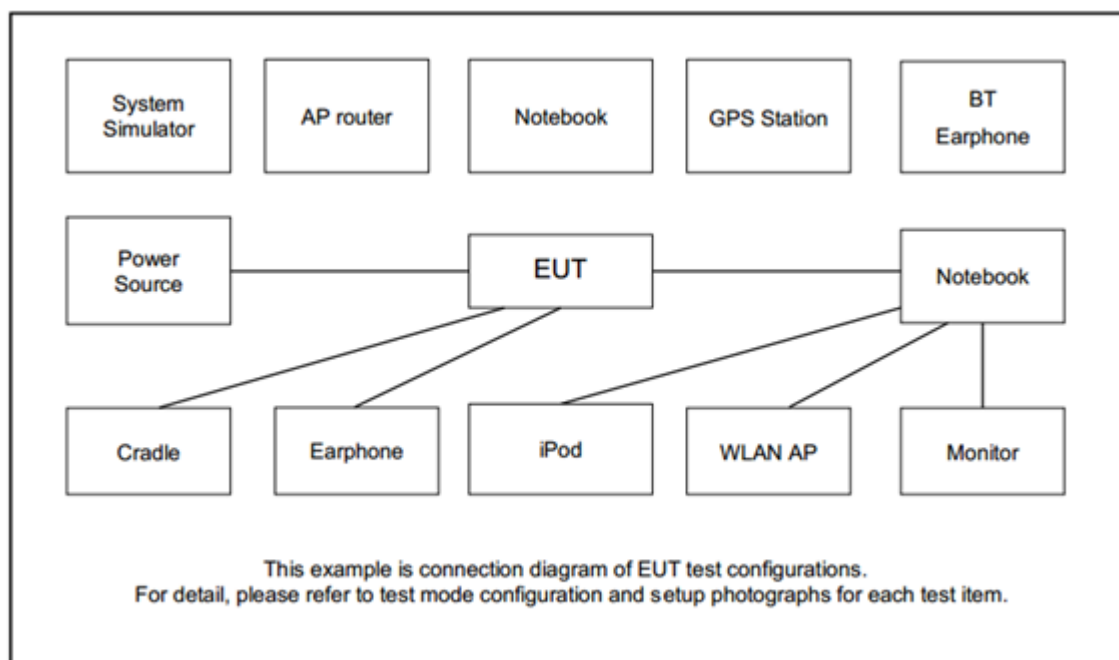
Modulation Type	Modulation	Modulation Type	Modulation
A	DFT-s-OFDM PI/2 BPSK	N/A	N/A
B	DFT-s-OFDM QPSK	F	CP-OFDM QPSK
C	DFT-s-OFDM 16QAM	G	CP-OFDM 16QAM
D	DFT-s-OFDM 64QAM	H	CP-OFDM 64QAM
E	DFT-s-OFDM 256QAM	I	CP-OFDM 256QAM

Test Item	Modulation Type	Bandwidth	RB Size	Channel
Conducted Power	A, B, C, F, G	All	1RB	L, M, H
EIRP	A, B, C, F, G	All	1RB	L, M, H
RSE	A, F	20 MHz or less	Inner_1RB	L, M, H

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. During the RSE preliminary test, the standalone mode and charging modes were verified. It is determined that the charging modes is the worst case for the official test.
4. For modulation of PI/2 BPSK & QPSK & 16QAM, the maximum power of PI/2 BPSK & QPSK & 16QAM is higher than other modulation(64QAM/256QAM), therefore, according to engineering evaluation, we choose higher power (PI/2 BPSK & QPSK & 16QAM) to perform tests and show in the report.
5. 5G NR n48 will support MIMO1 & Auxiliary antenna transmission only when in the Sounding Reference Signal (SRS) state. RSE has been verified.
6. 5GNR MIMO mode includes CP-OFDM QPSK & 16QAM, while SISO mode includes DFT-OFDM PI/2 BPSK & QPSK & 16QAM.
7. Since n42/ n43/ n48 mainly use the MIMO antenna for testing, with the Main antenna serving as the secondary antenna, the MIMO2 antenna is used only for measuring BPSK, QPSK, and 16QAM at the maximum bandwidth. For other bandwidths, only BPSK is measured.
8. 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

Item	Equipment	Brand Name	Model No.	FCC ID	Data Cable	Power Cord
1.	System Simulator	Anritsu	MT8821C	N/A	N/A	Unshielded, 1.8 m
2.	System Simulator	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m
3.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A

2.4 Frequency List of Low/Middle/High Channels

NR Band n48 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
40	Channel	638000	641666	645332
	Frequency	3570.0	3624.99	3679.98
30	Channel	637668	641666	645666
	Frequency	3565.02	3624.99	3684.99
20	Channel	637334	641666	646000
	Frequency	3560.01	3624.99	3690.0
15	Channel	637168	641666	646166
	Frequency	3557.52	3624.99	3692.49
10	Channel	637000	641666	646332
	Frequency	3555.0	3624.99	3694.98

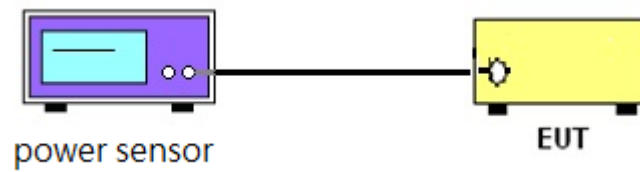
3 Conducted Test Items

3.1 Measuring Instruments

See list of measuring instruments of this test report.

3.1.1 Test Setup

3.1.2 Conducted Output Power



3.1.3 Test Result of Conducted Test

Please refer to Appendix A.

3.2 Conducted Output Power

3.2.1 Description of the Conducted Output Power Measurement

A power sensor was used to establish communication with the EUT. Its parameters were set to force the EUT transmitting at maximum output power. The measured power in the radio frequency on the transmitter output terminals shall be reported.

3.2.2 Test Procedures

1. The transmitter output port was connected to the power sensor.
2. Set EUT at maximum power.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the power sensor
5. The measure-and-sum technique is used for measuring in-band transmit power of a device.

Total power is the sum of the conducted power levels measured at the various output ports.

3.3 EIRP

3.3.1 Description of the EIRP Measurement

The EIRP of category A CBSD must not exceed 30 dBm / 10 megahertz.

The EIRP PSD of category A CBSD must not exceed 20 dBm / 1 megahertz.

The testing follows ANSI C63.26-2015 Section 5.2.5.5

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - L_C$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

L_C = signal attenuation in the connecting cable between the transmitter and antenna in dB

Device	Maximum EIRP (dBm/10 MHz)	Maximum PSD (dBm/MHz)
End User Device	23	n/a

Remark: Total channel power is complied with EIRP limit 23dBm/10MHz.

3.3.2 Test Procedures

1. The testing follows procedure in Section 5.2 of ANSI C63.26-2015 and KDB 940660 D01 Part 96 CBRS Eqpt v03 Section 3.2(b)(2) and 3.2(b)(3)
2. Determine the EIRP by adding the effective antenna gain to the measured average conducted power level.
3. The MIMO mode is completely uncorrelated, so the directional gain is selected the maximum gain among all antennas.

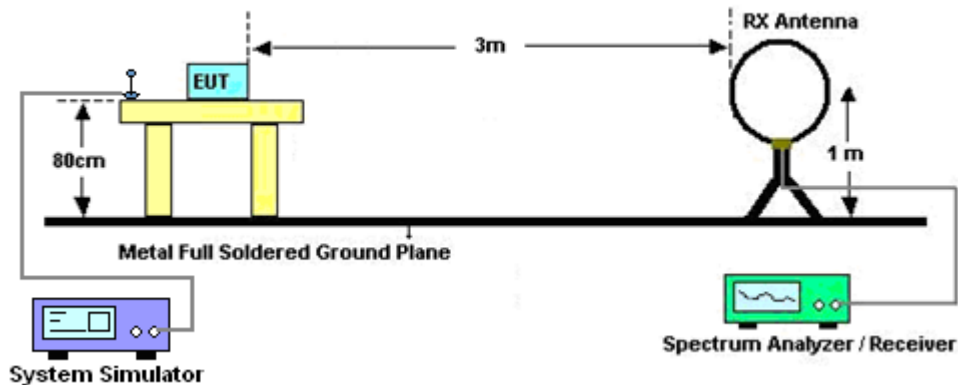
4 Radiated Test Items

4.1 Measuring Instruments

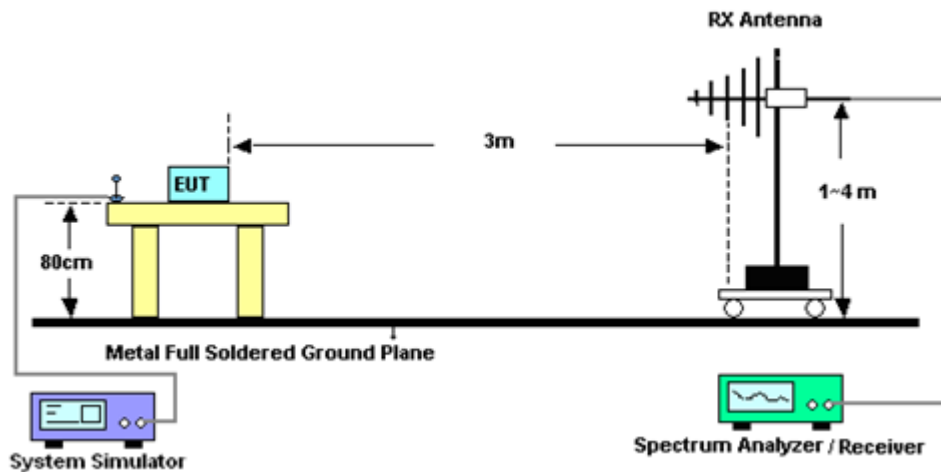
See list of measuring instruments of this test report.

4.2 Test Setup

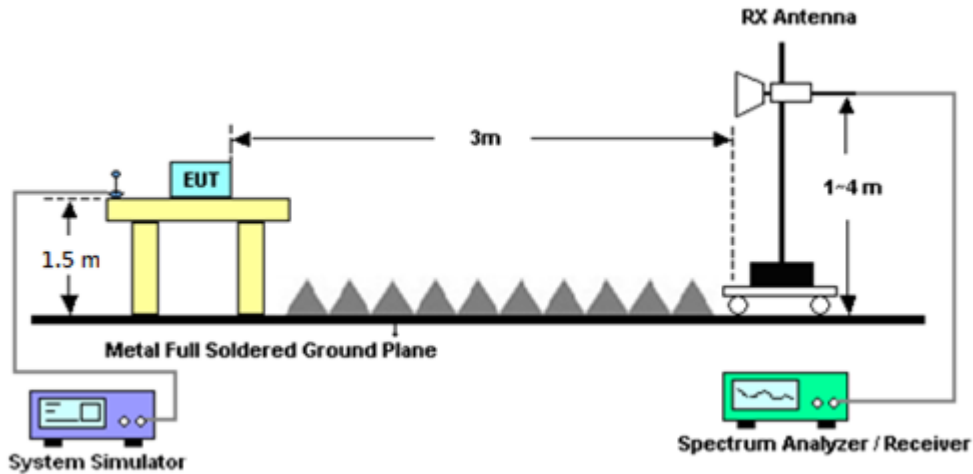
For radiated emissions below 30MHz



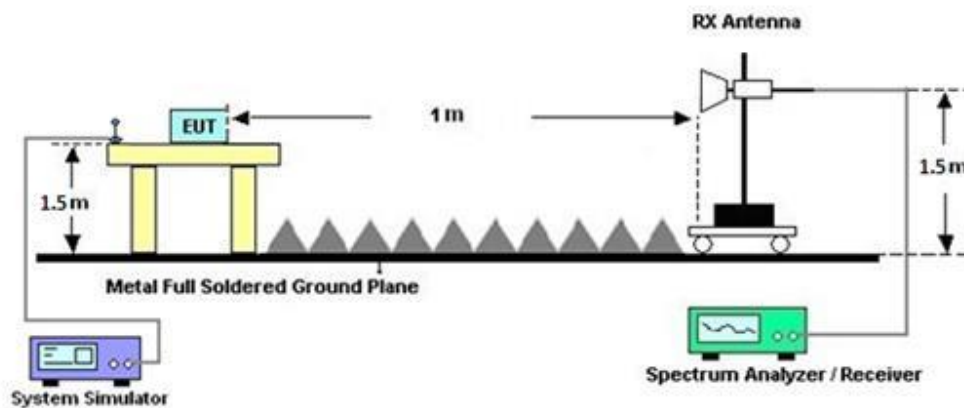
For radiated emissions from 30MHz to 1GHz



For radiated emissions from 1GHz to 18GHz



For radiated emissions above 18GHz



4.3 Test Result of Radiated Test

Please refer to Appendix B.

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.

4.4 Radiated Spurious Emission

4.4.1 Description of Radiated Spurious Emission Measurement

The radiated spurious emission was measured by substitution method according to ANSI C63.26-2015.

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 -40dBm / MHz .

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

4.4.2 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 height for frequency below 1GHz and 1.5 meter height for frequency above 1GHz respectively above ground.
2. The EUT was set 3 meters from the receiving antenna 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 1m to 4m to search the maximum spurious emission for both horizontal and vertical polarizations.
5. During the measurement, the system simulator parameters were set to force the EUT transmitting at maximum output power.
6. To convert spectrum reading E(dBuV/m) to EIRP(dBm)
$$\text{EIRP(dBm)} = \text{Level (dBuV/m)} + 20\log(d) - 104.77$$
, where d is the distance at which field strength limit is specified in the rules.
7.
$$\text{Field Strength Level (dBm)} = \text{Spectrum Reading (dBm)} + \text{Antenna Factor} + \text{Cable Loss} + \text{Read Level} - \text{Preamp Factor}.$$
8.
$$\text{ERP (dBm)} = \text{EIRP (dBm)} - 2.15$$
9. The RF fundamental frequency should be excluded against the limit line in the operating frequency band.



5 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Loop Antenna	Rohde & Schwarz	HFH2-Z2	100315	9 kHz~30 MHz	Feb. 23, 2024	Sep. 14, 2024~ Oct. 15, 2024	Feb. 22, 2025	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	37059 & 01	30MHz~1GHz	Nov. 03, 2023	Sep. 14, 2024~ Oct. 15, 2024	Nov. 02, 2024	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02114	1GHz~18GHz	Jul. 11, 2024	Sep. 14, 2024~ Oct. 15, 2024	Jul. 10, 2025	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA9170	00993	18GHz~40GHz	Nov. 24, 2023	Sep. 14, 2024~ Oct. 15, 2024	Nov. 23, 2024	Radiation (03CH12-HY)
Preamplifier	COM-POWER	PA-103	161075	10MHz~1GHz	Mar. 20, 2024	Sep. 14, 2024~ Oct. 15, 2024	Mar. 19, 2025	Radiation (03CH12-HY)
Preamplifier	Agilent	8449B	3008A02375	1GHz~26.5GHz	May 22, 2024	Sep. 14, 2024~ Oct. 15, 2024	May 21, 2025	Radiation (03CH12-HY)
Preamplifier	E-INSTRUMENT TECH LTD.	ERA-100M-18G-5 6-01-A70	EC1900249	1GHz~18GHz	Dec. 20, 2023	Sep. 14, 2024~ Oct. 15, 2024	Dec. 19, 2024	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 07, 2023	Sep. 14, 2024~ Oct. 15, 2024	Dec. 06, 2024	Radiation (03CH12-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290053	20Hz~26.5GHz	Sep. 09, 2024	Sep. 14, 2024~ Oct. 15, 2024	Sep. 08, 2025	Radiation (03CH12-HY)
Filter	Wainwright	WHKX12-900-100 0-15000-60SS	SN11	1GHz High Pass Filter	Mar. 13, 2024	Sep. 14, 2024~ Oct. 15, 2024	Mar. 12, 2025	Radiation (03CH12-HY)
Filter	Wainwright	WLKS1200-12SS	SN2	1.2GHz Low Pass Filter	Mar. 13, 2024	Sep. 14, 2024~ Oct. 15, 2024	Mar. 12, 2025	Radiation (03CH12-HY)
Filter	Wainwright	WHKX12-2700-30 00-18000-60SS	SN2	3GHz High Pass Filter	Mar. 13, 2024	Sep. 14, 2024~ Oct. 15, 2024	Mar. 12, 2025	Radiation (03CH12-HY)
Filter	Wainwright	WHKX8-5872.5-6 750-18000-40ST	SN2	6.75GHz High Pass Filter	Mar. 13, 2024	Sep. 14, 2024~ Oct. 15, 2024	Mar. 12, 2025	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9kHz~30MHz	Mar. 06, 2024	Sep. 14, 2024~ Oct. 15, 2024	Mar. 05, 2025	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 126E	0058/126E	30MHz~18GHz	Dec. 18, 2023	Sep. 14, 2024~ Oct. 15, 2024	Dec. 17, 2024	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Dec. 18, 2023	Sep. 14, 2024~ Oct. 15, 2024	Dec. 17, 2024	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803953/2	30MHz~40GHz	Dec. 18, 2023	Sep. 14, 2024~ Oct. 15, 2024	Dec. 17, 2024	Radiation (03CH12-HY)
Hygrometer	TECPEL	DTM-303B	TP210117	N/A	Oct. 19, 2023	Sep. 14, 2024~ Oct. 15, 2024	Oct. 18, 2024	Radiation (03CH12-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Sep. 14, 2024~ Oct. 15, 2024	N/A	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Sep. 14, 2024~ Oct. 15, 2024	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Sep. 14, 2024~ Oct. 15, 2024	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	Sep. 14, 2024~ Oct. 15, 2024	N/A	Radiation (03CH12-HY)
Hygrometer	TECPEL	DTM-303B	TP200886	NA	Mar. 14, 2024	Aug. 29, 2024~ Sep. 24, 2024	Mar. 13, 2025	Conducted (TH03-HY)
Base Station (Measure)	Anritsu	MT8000A	6262148275	FR1	Oct. 24, 2023	Aug. 29, 2024~ Sep. 24, 2024	Oct. 23, 2024	Conducted (TH03-HY)
Software 1	Sporton	FCC 5GNR_FSV3044_ 20231106	N/A	Conducted Test Item	N/A	Aug. 29, 2024~ Sep. 24, 2024	N/A	Conducted (TH03-HY)



6 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	3.291 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.073 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	2.082 dB
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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power) and EIRP

<SISO Mode>

<Main Antenna>

NR n48 Maximum Average Power [dBm] (GT - LC = 1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
10	1	1	PI/2 BPSK	20.18	20.63	20.50	21.63	0.1455
Limit	EIRP < 23dBm/10MHz			Result			Pass	

NR n48 Maximum Average Power [dBm] (GT - LC = 1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
15	1	1	PI/2 BPSK	20.17	20.51	20.54	21.54	0.1426
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = 1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
20	1	1	PI/2 BPSK	20.17	20.63	20.54	21.63	0.1455
Limit	EIRP < 23dBm/10MHz			Result			Pass	

NR n48 Maximum Average Power [dBm] (GT - LC = 1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
30	1	1	PI/2 BPSK	20.17	20.63	20.55	21.63	0.1455
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = 1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
40	1	1	PI/2 BPSK	20.27	20.68	20.60	21.68	0.1472
40	1	1	QPSK	20.17	20.60	20.50		
40	1	1	16-QAM	20.18	20.61	20.49	21.61	0.1449
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

**<MIMO2 Antenna>**

NR n48 Maximum Average Power [dBm] (GT - LC = -1.49 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
10	1	1	PI/2 BPSK	20.66	20.51	20.29	19.19	0.083
10	1	1	QPSK	20.68	20.60	20.28		
10	1	1	16-QAM	19.88	19.73	19.45	18.39	0.069
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = -1.49 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
20	1	1	PI/2 BPSK	20.78	20.72	20.44	19.33	0.0857
20	1	1	QPSK	20.82	20.81	20.52		
20	1	1	16-QAM	19.95	19.80	19.54	18.46	0.0701
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = -1.49 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
30	1	1	PI/2 BPSK	20.77	20.80	20.53	19.34	0.0859
30	1	1	QPSK	20.78	20.83	20.51		
30	1	1	16-QAM	20.00	19.90	19.61	18.51	0.071
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = -1.49 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
40	1	1	PI/2 BPSK	20.76	20.84	20.48	19.41	0.0873
40	1	1	QPSK	20.81	20.90	20.54		
40	1	1	16-QAM	19.97	19.95	19.54	18.48	0.0705
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.



<MIMO Mode>

<Main Antenna + MIMO2 Antenna>

Part96 NR n48 Maximum Average Power [dBm], DG = 1 dBi														
BW	RB	RB	Mod	Main Antenna			MIMO2 Antenna			Combine			EIRP	EIRP
(MHz)	Size	Offset		Lowest	Middle	Highest	Lowest	Middle	Highest	Lowest	Middle	Highest	(dBm)	(W)
10	1	1	QPSK	16.28	16.29	15.89	15.77	15.99	15.78	19.04	19.15	18.85	20.15	0.1035
10	1	1	16-QAM	16.21	15.62	15.44	15.42	15.53	15.26	18.84	18.59	18.36	19.84	0.0964
Limit	EIRP < 23dBm/10MHz			Result									Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

Part96 NR n48 Maximum Average Power [dBm], DG = 1 dBi														
BW	RB	RB	Mod	Main Antenna			MIMO2 Antenna			Combine			EIRP	EIRP
(MHz)	Size	Offset		Lowest	Middle	Highest	Lowest	Middle	Highest	Lowest	Middle	Highest	(dBm)	(W)
20	1	1	QPSK	16.21	16.30	16.08	16.03	16.26	16.08	19.13	19.29	19.09	20.29	0.1069
20	1	1	16-QAM	15.79	15.84	15.63	15.61	15.77	15.50	18.71	18.82	18.58	19.82	0.0959
Limit	EIRP < 23dBm/10MHz			Result									Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

Part96 NR n48 Maximum Average Power [dBm], DG = 1 dBi														
BW	RB	RB	Mod	Main Antenna			MIMO2 Antenna			Combine			EIRP	EIRP
(MHz)	Size	Offset		Lowest	Middle	Highest	Lowest	Middle	Highest	Lowest	Middle	Highest	(dBm)	(W)
30	1	1	QPSK	16.21	16.51	16.28	16.20	16.48	16.07	19.22	19.51	19.19	20.51	0.1125
30	1	1	16-QAM	15.81	15.87	15.65	15.79	15.98	15.53	18.81	18.94	18.60	19.94	0.0986
Limit	EIRP < 23dBm/10MHz		Result										Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

Part96 NR n48 Maximum Average Power [dBm], DG = 1 dBi														
BW	RB	RB	Mod	Main Antenna			MIMO2 Antenna			Combine			EIRP	EIRP
(MHz)	Size	Offset		Lowest	Middle	Highest	Lowest	Middle	Highest	Lowest	Middle	Highest	(dBm)	(W)
40	1	1	QPSK	16.51	16.59	16.37	16.23	16.30	15.85	19.38	19.46	19.13	20.46	0.1112
40	1	1	16-QAM	15.84	15.93	15.61	15.57	15.87	15.35	18.72	18.91	18.49	19.91	0.0979
Limit	EIRP < 23dBm/10MHz			Result									Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

Remark : All transmit signals are completely uncorrelated with each other



<SRS Mode>

<MIMO1 Antenna>

NR n48 Maximum Average Power [dBm] (GT - LC = 1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
10	1	1	PI/2 BPSK	16.28	17.68	16.46	18.68	0.0738
10	1	1	QPSK	16.21	17.53	16.48		
10	1	1	16-QAM	15.35	17.42	15.54		
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = 1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
15	1	1	PI/2 BPSK	17.34	17.91	17.83	18.91	0.0778
15	1	1	QPSK	17.58	17.84	17.65		
15	1	1	16-QAM	16.13	16.92	16.72		
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = 1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
20	1	1	PI/2 BPSK	16.42	16.72	17.31	18.62	0.0728
20	1	1	QPSK	16.92	16.62	17.62		
20	1	1	16-QAM	16.31	15.45	16.73		
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = 1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
30	1	1	PI/2 BPSK	17.25	16.57	17.28	18.52	0.0711
30	1	1	QPSK	17.48	16.52	17.52		
30	1	1	16-QAM	16.15	15.42	16.68		
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = 1 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
40	1	1	PI/2 BPSK	17.21	15.49	17.31	18.52	0.0711
40	1	1	QPSK	17.41	15.48	17.52		
40	1	1	16-QAM	16.20	15.43	16.52		
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

**<Aux. Antenna>**

NR n48 Maximum Average Power [dBm] (GT - LC = -1.49 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
10	1	1	PI/2 BPSK	18.11	18.15	17.42	16.86	0.0485
10	1	1	QPSK	18.35	18.12	17.23		
10	1	1	16-QAM	17.45	17.41	16.12	15.96	0.0394
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = -1.49 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
15	1	1	PI/2 BPSK	18.15	18.17	17.48	16.83	0.0482
15	1	1	QPSK	18.32	18.15	17.28		
15	1	1	16-QAM	17.45	17.40	16.22	15.96	0.0394
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = -1.49 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
20	1	1	PI/2 BPSK	18.13	18.18	17.44	16.85	0.0484
20	1	1	QPSK	18.34	18.15	17.27		
20	1	1	16-QAM	17.41	17.45	16.23	15.96	0.0394
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = -1.49 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
30	1	1	PI/2 BPSK	18.13	18.17	17.35	16.82	0.0481
30	1	1	QPSK	18.31	18.16	17.26		
30	1	1	16-QAM	17.42	17.43	16.31	15.94	0.0393
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.

NR n48 Maximum Average Power [dBm] (GT - LC = -1.49 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP(W)
40	1	1	PI/2 BPSK	18.11	18.20	17.38	16.79	0.0478
40	1	1	QPSK	18.28	18.18	17.28		
40	1	1	16-QAM	17.41	17.44	16.33	15.95	0.0394
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Total EIRP power is less than partial EIRP limit 23 dBm/10MHz.



Appendix B. Test Results of Radiated Test

B1. Summary of each worse mode

Mode	Part	Band	Ch	Freq (MHz)	Level (dBm)	Det	Ant Factor (dB)	AmplCbl (dB)	Filter (dB)	EIRPCF (dB)	Reading (dBuV)	Limit (dBm)	Margin (dB)	Pol	Ant
90	Part 96	NR SA n48	L	14205	-50.88	RMS	40.99	-45.89	0.45	-95.23	48.80	-40.00	-10.88	H	MIMO2
91	Part 96	NR SA n48	L	14205	-50.64	RMS	40.99	-45.89	0.45	-95.23	49.04	-40.00	-10.64	V	Aux. (SRS)
92	Part 96	NR SA n48	L	14205	-50.90	RMS	40.99	-45.89	0.45	-95.23	48.78	-40.00	-10.90	V	MIMO1 (SRS)
93	Part 96	NR SA n48_MIMO	L	14205	-50.96	RMS	40.99	-45.89	0.45	-95.23	48.72	-40.00	-10.96	V	MIMO2+Main

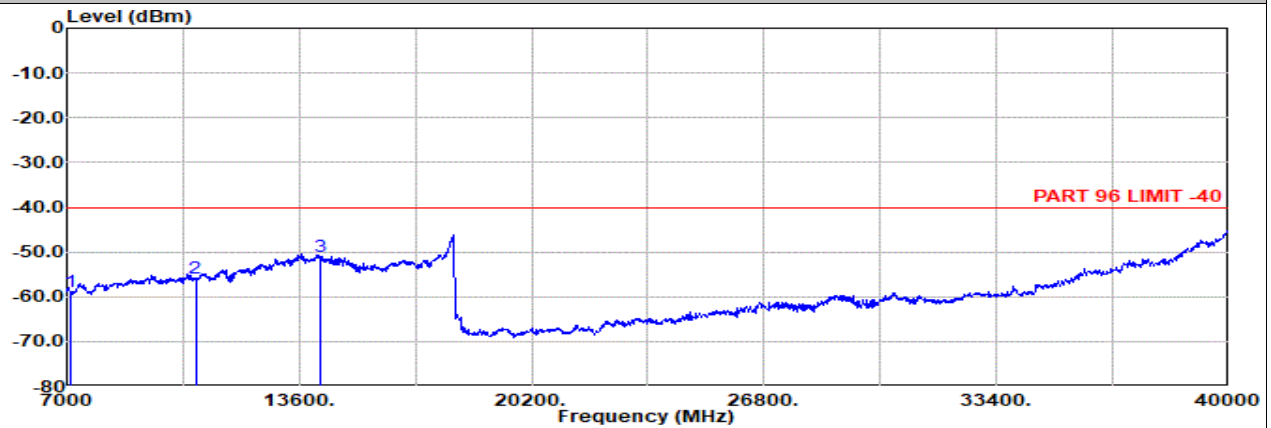


<MIMO2 Antenna>

Part 96 Mode 90

NR SA n48 20M Ch637334 1RB1 BPSK

L

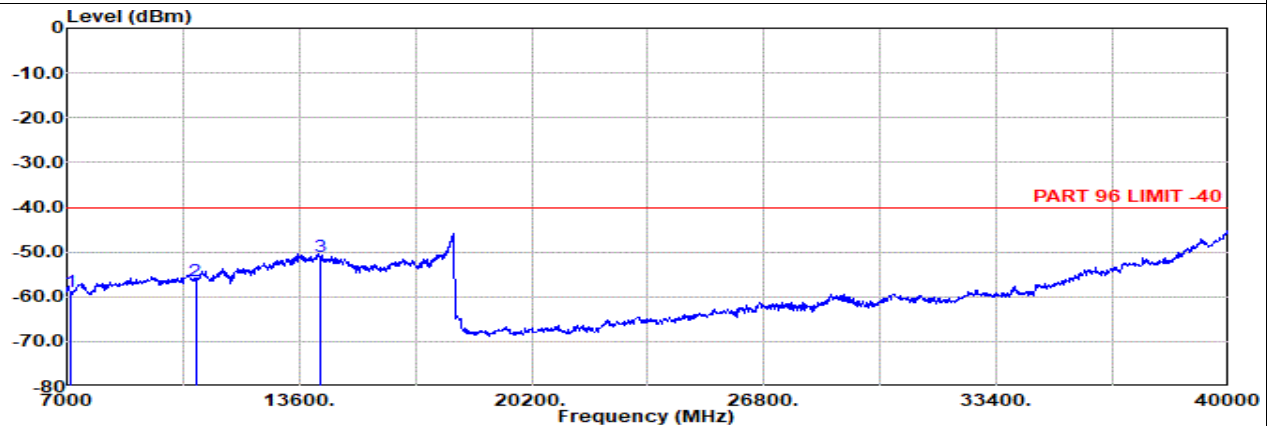


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Horizontal

: NR SA n48 20M Ch637334 1RB1 BPSK

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol
				Factor	1					
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB
1	7102.00	-58.87	RMS	36.61	-51.91	0.90	-95.23	50.76	-40.00	-18.87
2	10653.00	-55.96	RMS	39.20	-50.06	0.26	-95.23	49.87	-40.00	-15.96
3	14205.00	-50.88	RMS	40.99	-45.89	0.45	-95.23	48.80	-40.00	-10.88



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Vertical

: NR SA n48 20M Ch637334 1RB1 BPSK

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol
				Factor	1					
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB
1	7102.00	-58.78	RMS	36.61	-51.91	0.90	-95.23	50.85	-40.00	-18.78
2	10653.00	-56.33	RMS	39.20	-50.06	0.26	-95.23	49.50	-40.00	-16.33
3	14205.00	-51.08	RMS	40.99	-45.89	0.45	-95.23	48.60	-40.00	-11.08

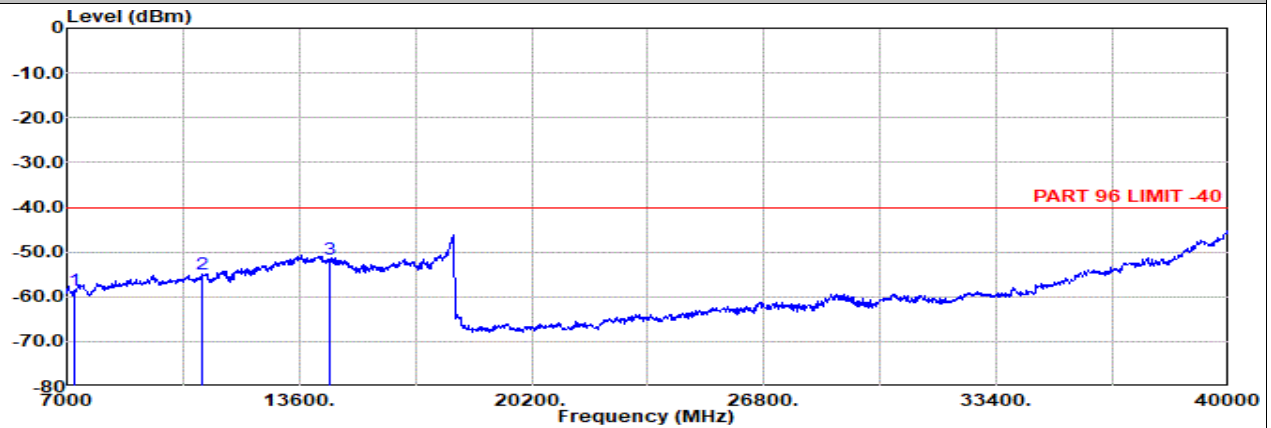


<MIMO2 Antenna>

Part 96 Mode 90

NR SA n48 20M Ch641666 1RB1 BPSK

M

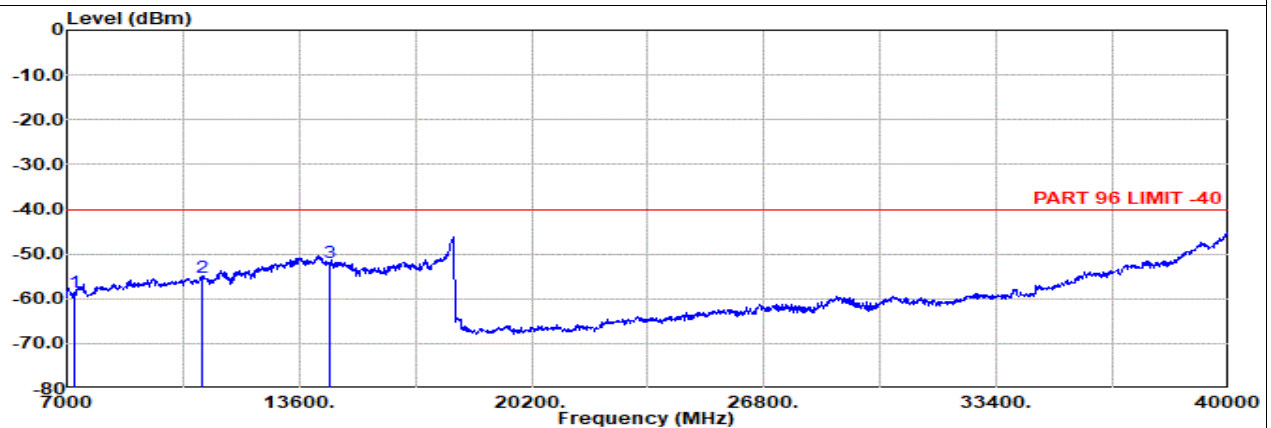


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Horizontal

: NR SA n48 20M Ch641666 1RB1 BPSK

	Freq	Level	Detector	Ant	Amp\Cb	Filter	EIRPCF	Readin	Limit	Margin	Pol
				Factor	1				g		
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7232.00	-58.64	RMS	37.13	-51.93	0.88	-95.23	50.51	-40.00	-18.64	Horizontal
2	10848.00	-54.87	RMS	39.20	-49.81	0.27	-95.23	50.70	-40.00	-14.87	Horizontal
3	14465.00	-51.53	RMS	40.63	-45.45	0.44	-95.23	48.08	-40.00	-11.53	Horizontal



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Vertical

: NR SA n48 20M Ch641666 1RB1 BPSK

	Freq	Level	Detector	Ant Factor	Amp\Cb 1	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7232.00	-58.64	RMS	37.13	-51.93	0.88	-95.23	50.51	-40.00	-18.64	Vertical
2	10848.00	-55.14	RMS	39.20	-49.81	0.27	-95.23	50.43	-40.00	-15.14	Vertical
3	14465.00	-52.04	RMS	40.63	-45.45	0.44	-95.23	47.57	-40.00	-12.04	Vertical

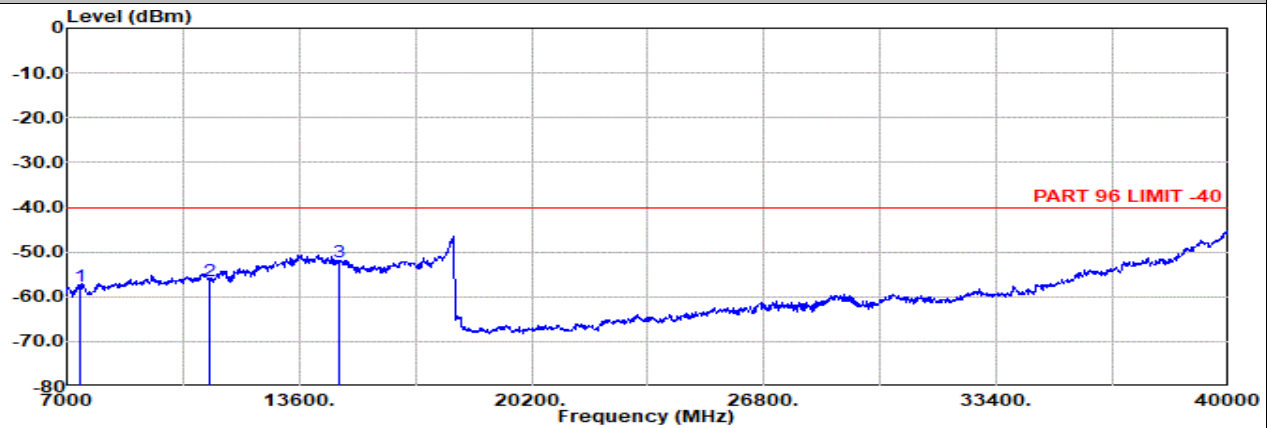


<MIMO2 Antenna>

Part 96 Mode 90

NR SA n48 20M Ch646000 1RB1 BPSK

H

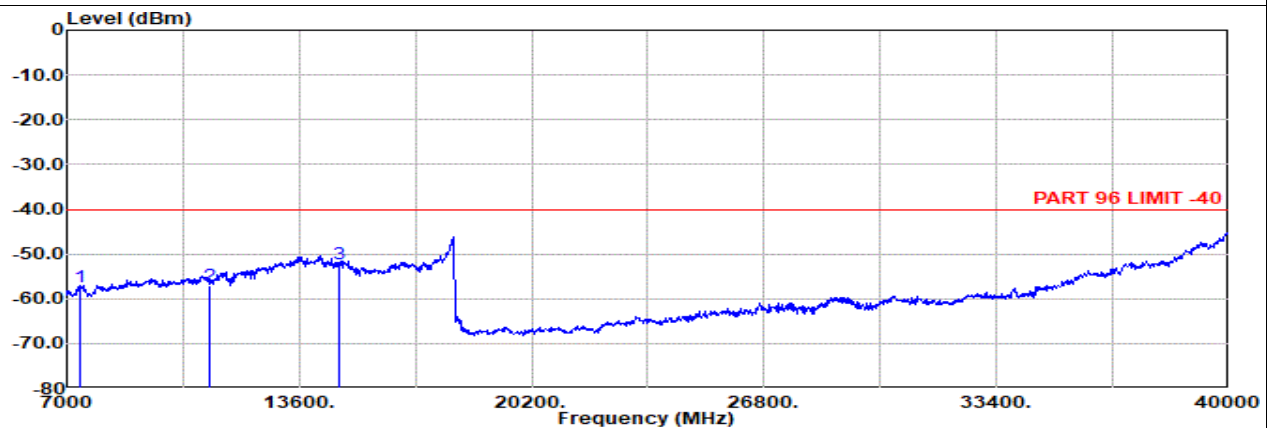


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Horizontal

NR SA n48 20M Ch646000 1RB1 BPSK

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol
				Factor	1					
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB
1	7362.00	-57.54	RMS	36.83	-51.67	0.83	-95.23	51.70	-40.00	-17.54
2	11043.00	-56.44	RMS	38.90	-49.48	0.28	-95.23	49.09	-40.00	-16.44
3	14725.00	-52.26	RMS	40.65	-45.56	0.42	-95.23	47.46	-40.00	-12.26



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Vertical

NR SA n48 20M Ch646000 1RB1 BPSK

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol
				Factor	1					
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB
1	7362.00	-57.34	RMS	36.83	-51.67	0.83	-95.23	51.90	-40.00	-17.34
2	11043.00	-56.96	RMS	38.90	-49.48	0.28	-95.23	48.57	-40.00	-16.96
3	14725.00	-52.31	RMS	40.65	-45.56	0.42	-95.23	47.41	-40.00	-12.31

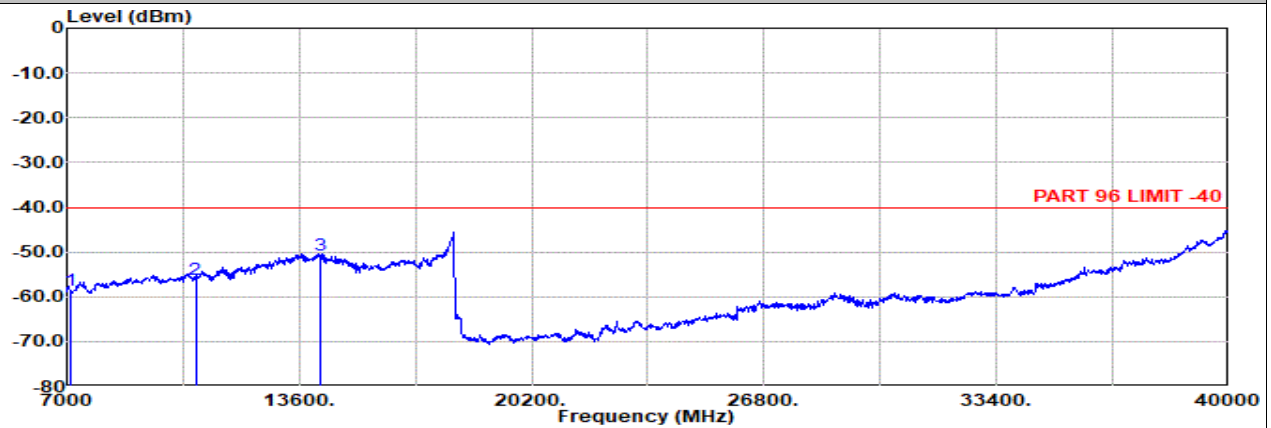


<Aux. Antenna> (SRS)

Part 96 Mode 91

NR SA n48 20M Ch637334 1RB1 BPSK

L

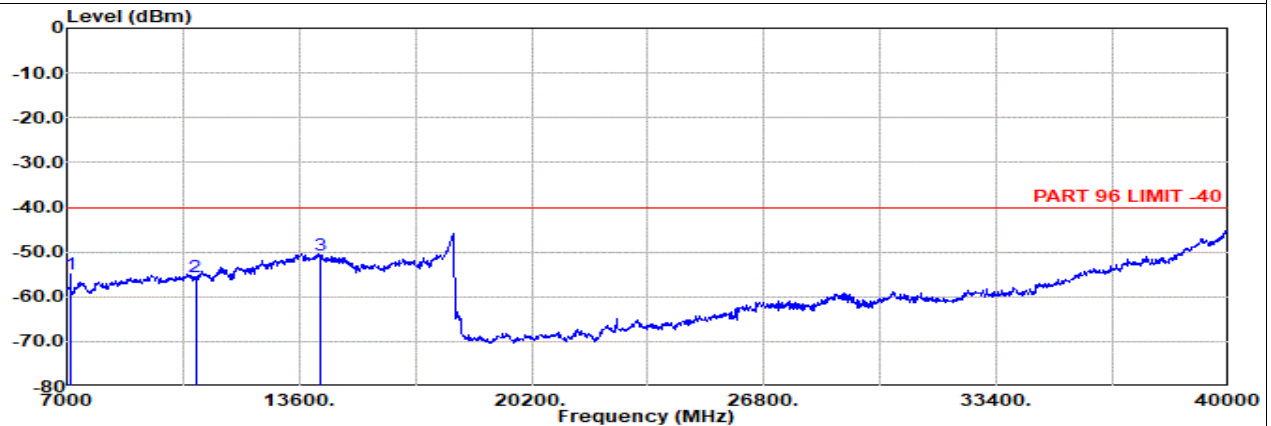


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Horizontal

NR SA n48 20M Ch637334 1RB1 BPSK

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol
				Factor	1					
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB
1	7102.00	-58.44	RMS	36.61	-51.91	0.90	-95.23	51.19	-40.00	-18.44
2	10653.00	-56.28	RMS	39.20	-50.06	0.26	-95.23	49.55	-40.00	-16.28
3	14205.00	-50.78	RMS	40.99	-45.89	0.45	-95.23	48.90	-40.00	-10.78



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Vertical

NR SA n48 20M Ch637334 1RB1 BPSK

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol
				Factor	1					
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB
1	7102.00	-54.92	RMS	36.61	-51.91	0.90	-95.23	54.71	-40.00	-14.92
2	10653.00	-55.63	RMS	39.20	-50.06	0.26	-95.23	50.20	-40.00	-15.63
3	14205.00	-50.64	RMS	40.99	-45.89	0.45	-95.23	49.04	-40.00	-10.64

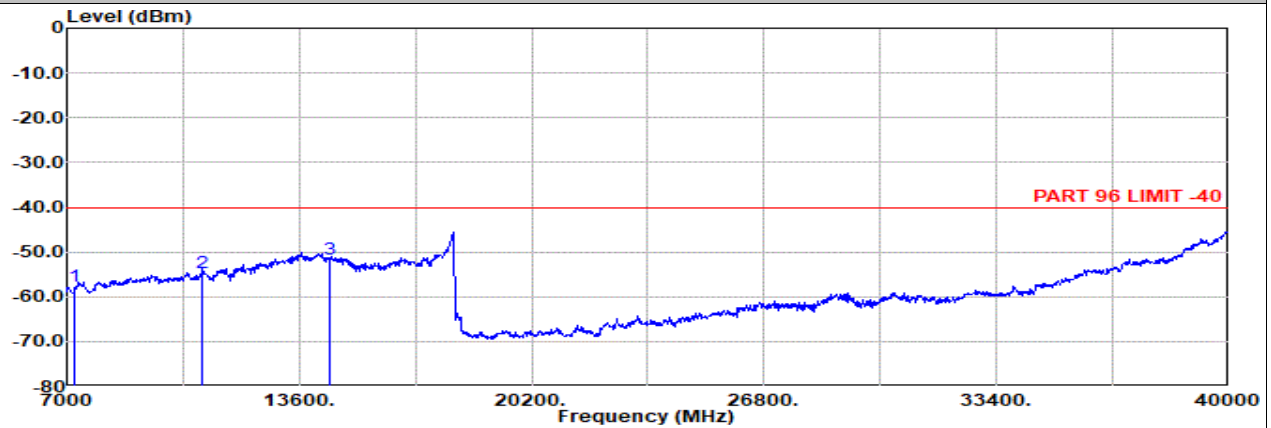


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Part 96 Mode 91

NR SA n48 20M Ch641666 1RB1 BPSK

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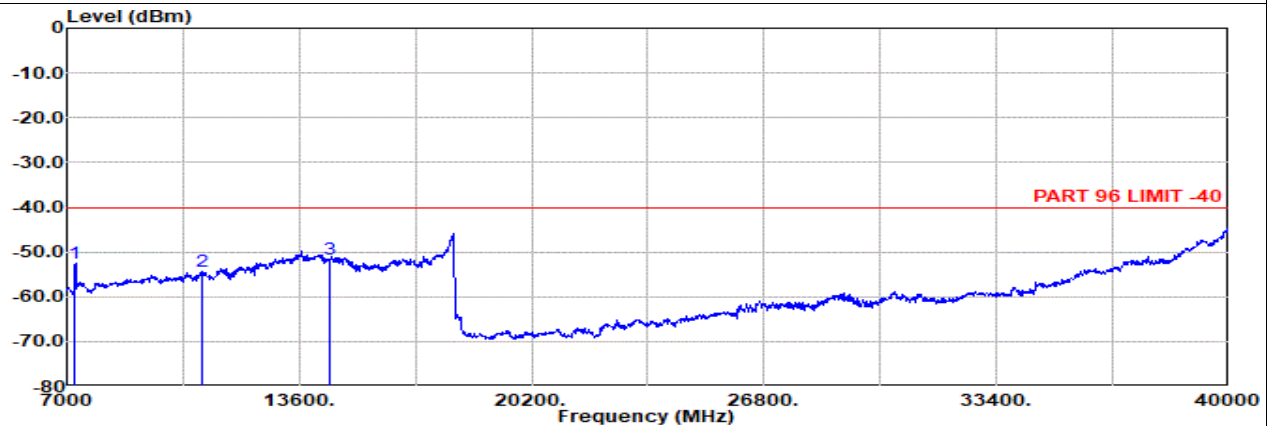


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Horizontal

: NR SA n48 20M Ch641666 1RB1 BPSK

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol	
				Factor	1						
	MHz	dBm		dB/m	dB	dB	dBuV	dBm	dB		
1	7232.00	-57.79	RMS	37.13	-51.93	0.88	-95.23	51.36	-40.00	-17.79	Horizontal
2	10848.00	-54.50	RMS	39.20	-49.81	0.27	-95.23	51.07	-40.00	-14.50	Horizontal
3	14465.00	-51.51	RMS	40.63	-45.45	0.44	-95.23	48.10	-40.00	-11.51	Horizontal



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Vertical

: NR SA n48 20M Ch641666 1RB1 BPSK

	Freq	Level	Detector	Ant Factor	Amp\Cb 1	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7232.00	-52.65	RMS	37.13	-51.93	0.88	-95.23	56.50	-40.00	-12.65	Vertical
2	10848.00	-54.34	RMS	39.20	-49.81	0.27	-95.23	51.23	-40.00	-14.34	Vertical
3	14465.00	-51.69	RMS	40.63	-45.45	0.44	-95.23	47.92	-40.00	-11.69	Vertical

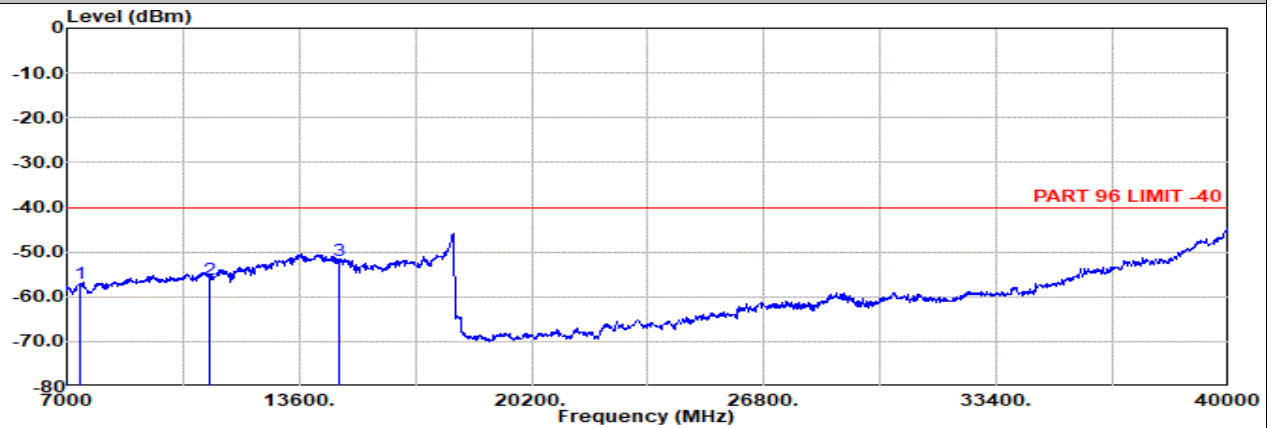


<Aux. Antenna> (SRS)

Part 96 Mode 91

NR SA n48 20M Ch646000 1RB1 BPSK

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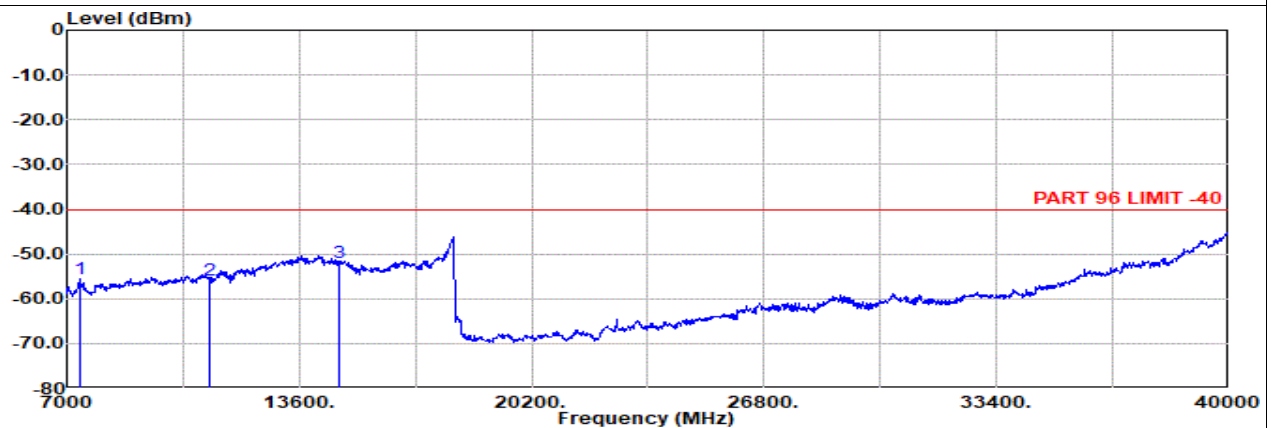


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Horizontal

: NR SA n48 20M Ch646000 1RB1 BPSK

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol
				Factor	1					
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB
1	7362.00	-57.04	RMS	36.83	-51.67	0.83	-95.23	52.20	-40.00	-17.04
2	11043.00	-56.28	RMS	38.90	-49.48	0.28	-95.23	49.25	-40.00	-16.28
3	14725.00	-51.83	RMS	40.65	-45.56	0.42	-95.23	47.89	-40.00	-11.83



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Vertical

: NR SA n48 20M Ch646000 1RB1 BPSK

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol
				Factor	1					
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB
1	7362.00	-55.62	RMS	36.83	-51.67	0.83	-95.23	53.62	-40.00	-15.62
2	11043.00	-55.91	RMS	38.90	-49.48	0.28	-95.23	49.62	-40.00	-15.91
3	14725.00	-51.78	RMS	40.65	-45.56	0.42	-95.23	47.94	-40.00	-11.78

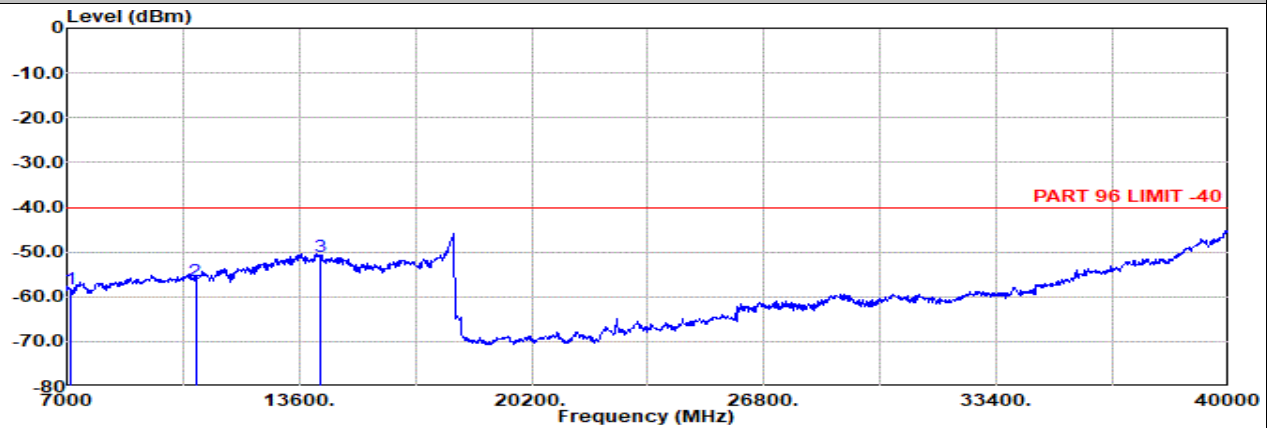


<MIMO1 Antenna> (SRS)

Part 96 Mode 92

NR SA n48 20M Ch637334 1RB1 BPSK

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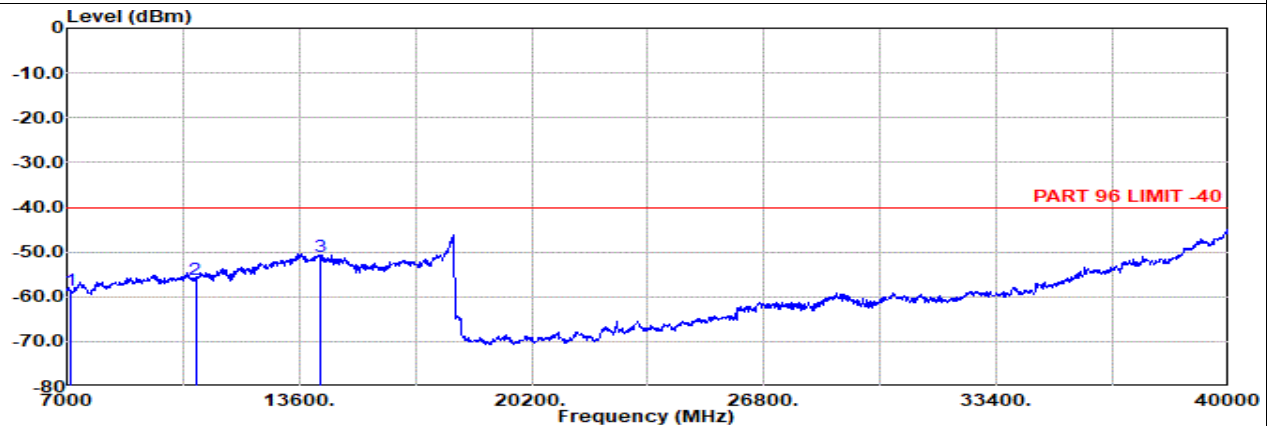


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Horizontal

NR SA n48 20M Ch637334 1RB1 BPSK

	Freq MHz	Level dBm	Detector	Ant Amp\Cb Filter		EIRPCF	Readin g	Limit		Margin	Pol
				Factor	1						
1	7102.00	-58.32	RMS	36.61	-51.91	0.90	-95.23	51.31	-40.00	-18.32	Horizontal
2	10653.00	-56.44	RMS	39.20	-50.06	0.26	-95.23	49.39	-40.00	-16.44	Horizontal
3	14205.00	-51.07	RMS	40.99	-45.89	0.45	-95.23	48.61	-40.00	-11.07	Horizontal



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Vertical

NR SA n48 20M Ch637334 1RB1 BPSK

	Freq MHz	Level dBm	Detector	Ant Amp\Cb Filter		EIRPCF	Readin g	Limit		Margin	Pol
				Factor	1						
1	7102.00	-58.44	RMS	36.61	-51.91	0.90	-95.23	51.19	-40.00	-18.44	Vertical
2	10653.00	-56.28	RMS	39.20	-50.06	0.26	-95.23	49.55	-40.00	-16.28	Vertical
3	14205.00	-50.90	RMS	40.99	-45.89	0.45	-95.23	48.78	-40.00	-10.90	Vertical

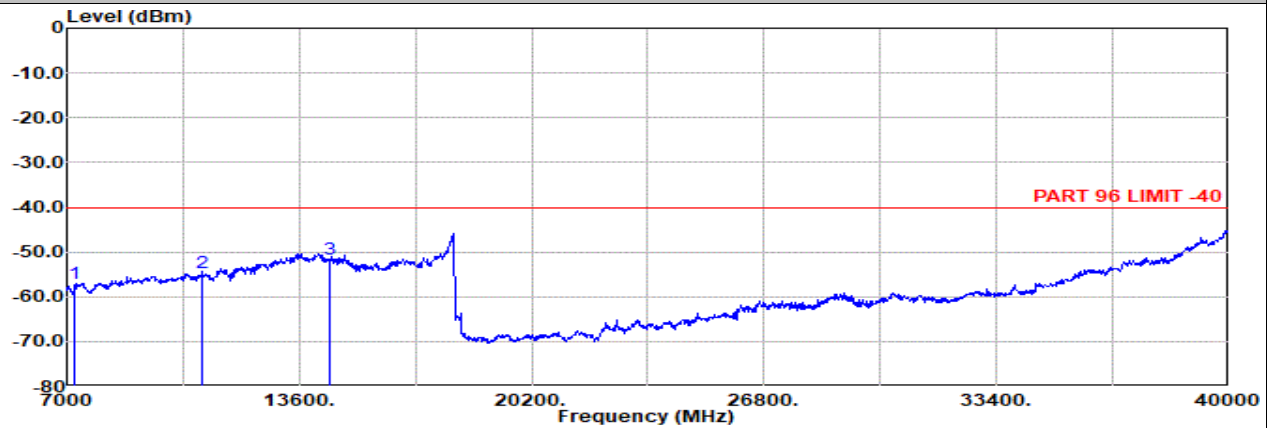


<MIMO1 Antenna> (SRS)

Part 96 Mode 92

NR SA n48 20M Ch641666 1RB1 BPSK

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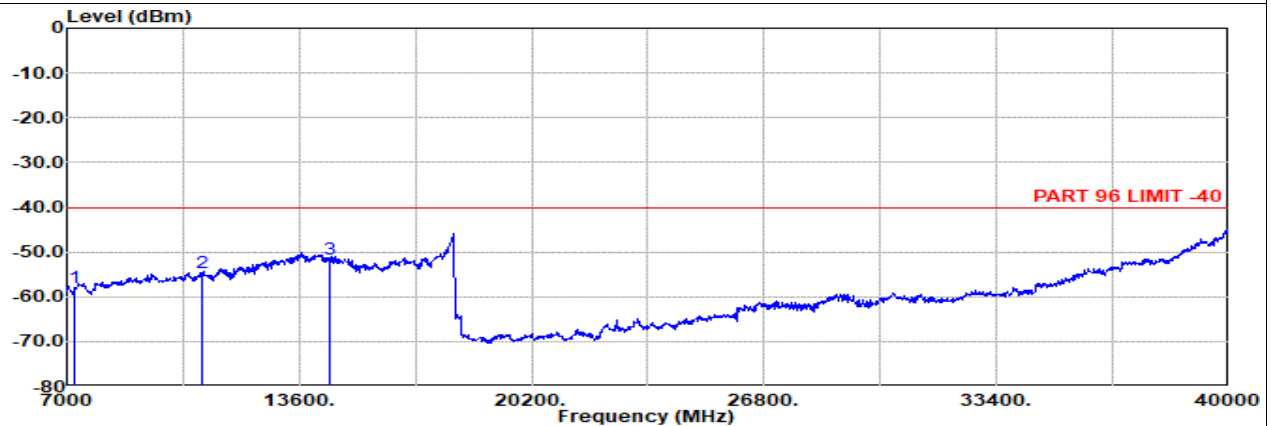


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Horizontal

: NR SA n48 20M Ch641666 1RB1 BPSK

	Freq MHz	Level dBm	Detector	Ant Amp\Cb Filter		EIRPCF	Readin g	Limit		Margin	Pol
				Factor	1			dBm	dB		
1	7232.00	-57.12	RMS	37.13	-51.93	0.88	-95.23	52.03	-40.00	-17.12	Horizontal
2	10848.00	-54.61	RMS	39.20	-49.81	0.27	-95.23	50.96	-40.00	-14.61	Horizontal
3	14465.00	-51.72	RMS	40.63	-45.45	0.44	-95.23	47.89	-40.00	-11.72	Horizontal



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Vertical

: NR SA n48 20M Ch641666 1RB1 BPSK

	Freq MHz	Level dBm	Detector	Ant Amp\Cb Filter		EIRPCF	Readin g	Limit		Margin	Pol
				Factor	1			dBm	dB		
1	7232.00	-57.91	RMS	37.13	-51.93	0.88	-95.23	51.24	-40.00	-17.91	Vertical
2	10848.00	-54.69	RMS	39.20	-49.81	0.27	-95.23	50.88	-40.00	-14.69	Vertical
3	14465.00	-51.49	RMS	40.63	-45.45	0.44	-95.23	48.12	-40.00	-11.49	Vertical

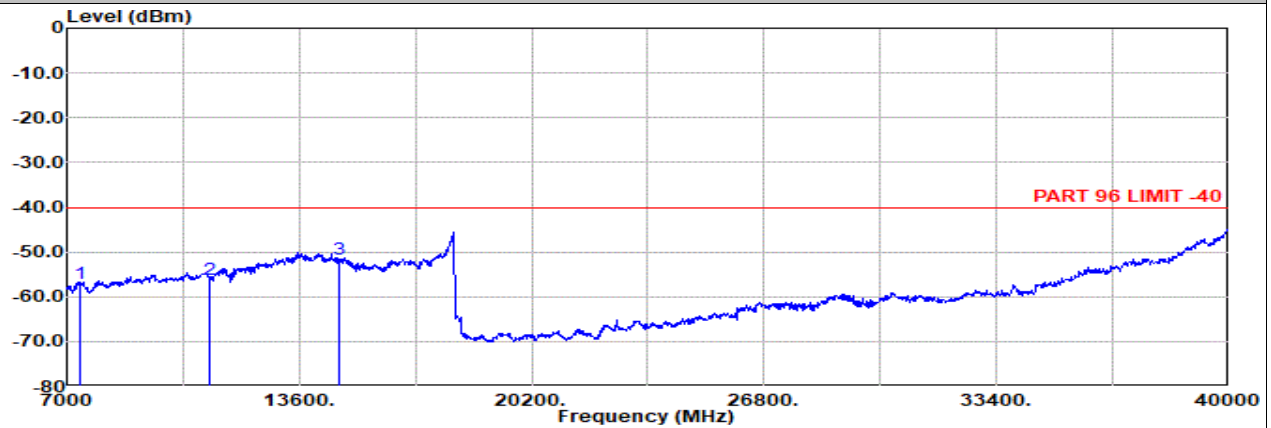


<MIMO1 Antenna> (SRS)

Part 96 Mode 92

NR SA n48 20M Ch646000 1RB1 BPSK

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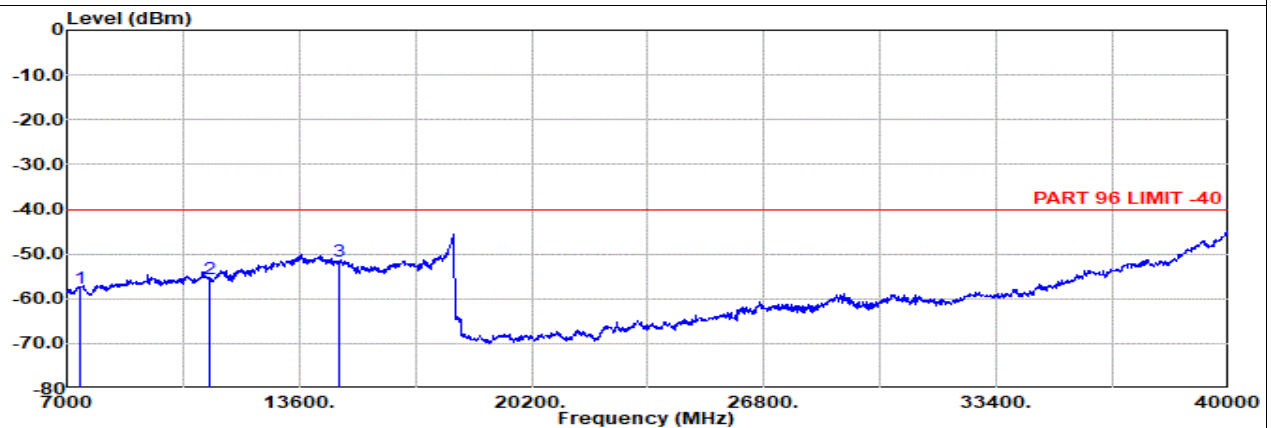


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Horizontal

: NR SA n48 20M Ch646000 1RB1 BPSK

	Freq Level		Detector	Ant Amp\Cb Filter		EIRPCF	Readin g	Limit	Margin	Pol	
	Factor	1		dB/m	dB						dB
	MHz	dBm									
1	7362.00	-57.19	RMS	36.83	-51.67	0.83	-95.23	52.05	-40.00	-17.19	Horizontal
2	11043.00	-56.08	RMS	38.90	-49.48	0.28	-95.23	49.45	-40.00	-16.08	Horizontal
3	14725.00	-51.72	RMS	40.65	-45.56	0.42	-95.23	48.00	-40.00	-11.72	Horizontal



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Vertical

: NR SA n48 20M Ch646000 1RB1 BPSK

	Freq	Level	Detector	Ant Factor	Amp\Cb 1	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7362.00	-57.53	RMS	36.83	-51.67	0.83	-95.23	51.71	-40.00	-17.53	Vertical
2	11043.00	-55.63	RMS	38.90	-49.48	0.28	-95.23	49.90	-40.00	-15.63	Vertical
3	14725.00	-51.69	RMS	40.65	-45.56	0.42	-95.23	48.03	-40.00	-11.69	Vertical

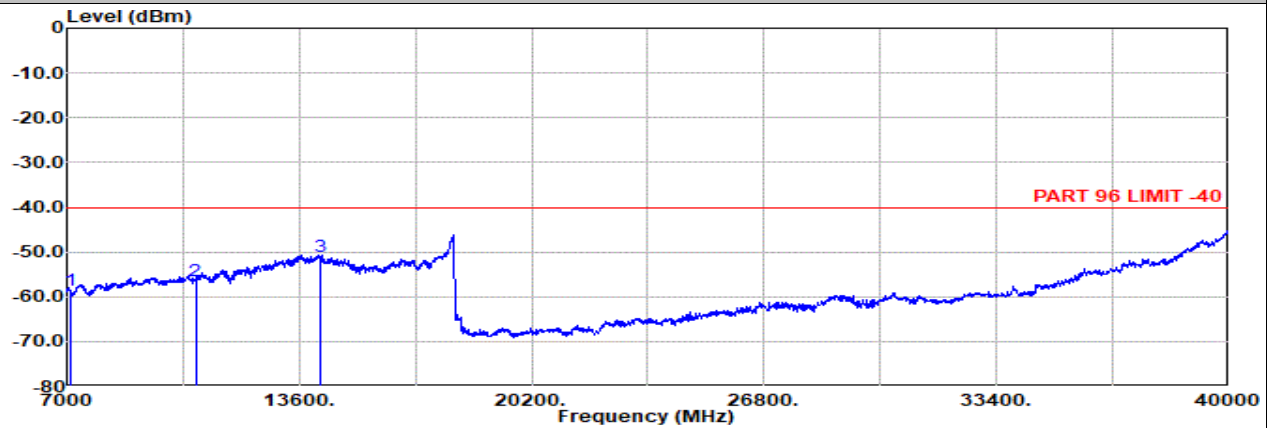


<MIMO2 Antenna + Main Antenna>

Part 96 Mode 93

NR SA n48_MIMO 20M Ch637334 1RB1 QPSK

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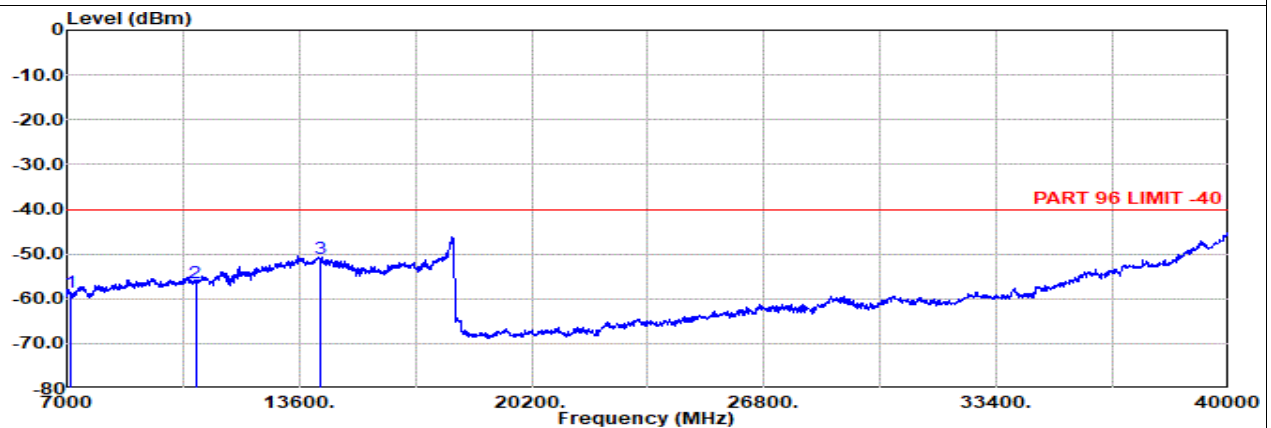


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Horizontal

: SA n48 MIMO 20M Ch637334 1RB1 QPSK

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol
				Factor	1					
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB
1	7102.00	-58.63	RMS	36.61	-51.91	0.90	-95.23	51.00	-40.00	-18.63
2	10653.00	-56.57	RMS	39.20	-50.06	0.26	-95.23	49.26	-40.00	-16.57
3	14205.00	-51.08	RMS	40.99	-45.89	0.45	-95.23	48.60	-40.00	-11.08



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Vertical

: SA n48 MIMO 20M Ch637334 1RB1 QPSK

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol
				Factor	1					
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB
1	7102.00	-58.71	RMS	36.61	-51.91	0.90	-95.23	50.92	-40.00	-18.71
2	10653.00	-56.39	RMS	39.20	-50.06	0.26	-95.23	49.44	-40.00	-16.39
3	14205.00	-50.96	RMS	40.99	-45.89	0.45	-95.23	48.72	-40.00	-10.96

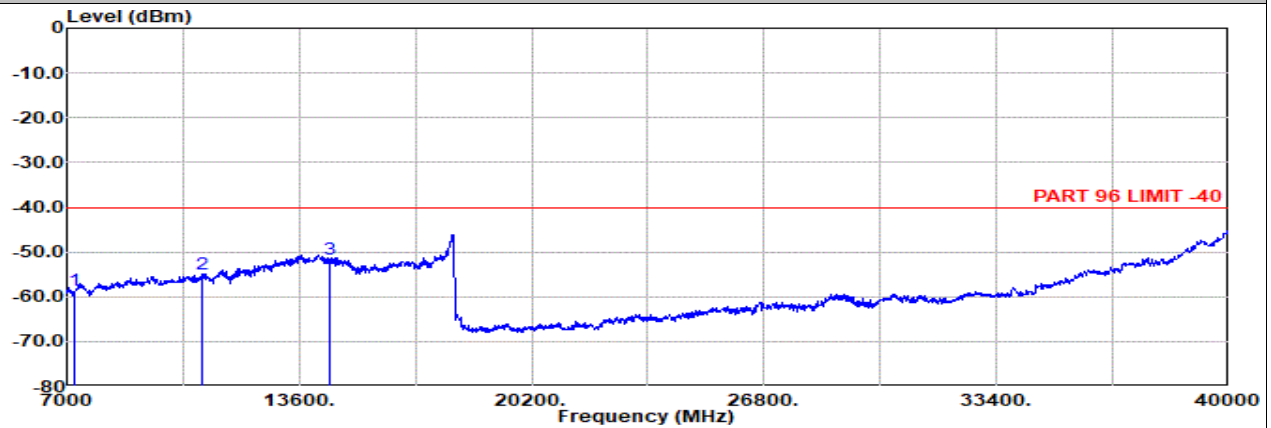


<MIMO2 Antenna + Main Antenna>

Part 96 Mode 93

NR SA n48_MIMO 20M Ch641666 1RB1 QPSK

M

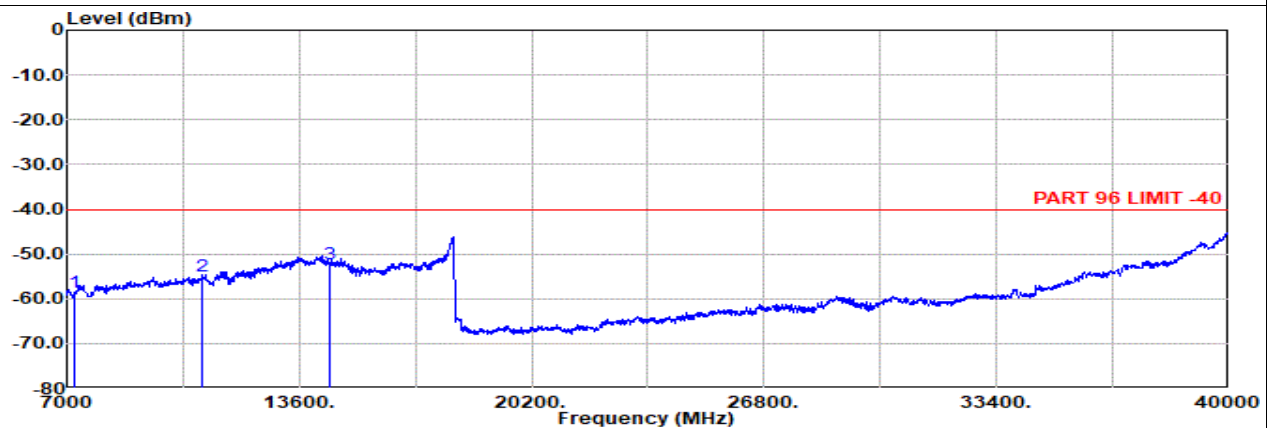


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Horizontal

: SA n48 MIMO 20M Ch641666 1RB1 QPSK

	Freq MHz	Level dBm	Detector	Ant Amp\Cb Filter		EIRPCF	Readin g	Limit		Margin	Pol
				Factor	1			dBm	dB		
1	7232.00	-58.43	RMS	37.13	-51.93	0.88	-95.23	50.72	-40.00	-18.43	Horizontal
2	10848.00	-54.99	RMS	39.20	-49.81	0.27	-95.23	50.58	-40.00	-14.99	Horizontal
3	14465.00	-51.73	RMS	40.63	-45.45	0.44	-95.23	47.88	-40.00	-11.73	Horizontal



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Vertical

: SA n48 MIMO 20M Ch641666 1RB1 QPSK

	Freq MHz	Level dBm	Detector	Ant Amp\Cb Filter		EIRPCF	Readin g	Limit		Margin	Pol
				Factor	1			dBm	dB		
1	7232.00	-58.44	RMS	37.13	-51.93	0.88	-95.23	50.71	-40.00	-18.44	Vertical
2	10848.00	-55.02	RMS	39.20	-49.81	0.27	-95.23	50.55	-40.00	-15.02	Vertical
3	14465.00	-52.18	RMS	40.63	-45.45	0.44	-95.23	47.43	-40.00	-12.18	Vertical

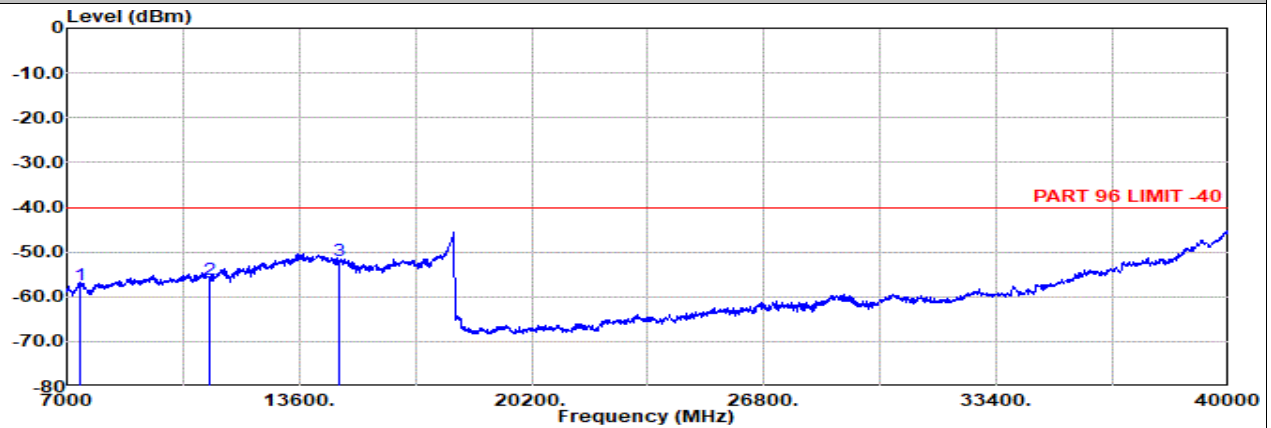


<MIMO2 Antenna + Main Antenna>

Part 96 Mode 93

NR SA n48_MIMO 20M Ch646000 1RB1 QPSK

H

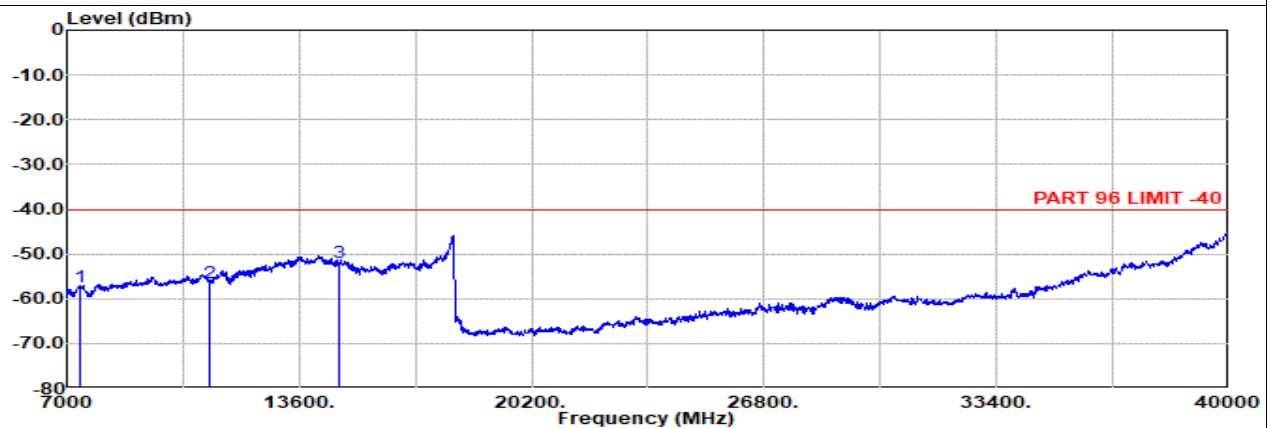


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Horizontal

: SA n48 MIMO 20M Ch646000 1RB1 QPSK

	Freq MHz	Level dBm	Detector	Ant Amp\Cb Filter		EIRPCF	Readin g	Limit		Margin	Pol
				Factor	1						
1	7362.00	-57.34	RMS	36.83	-51.67	0.83	-95.23	51.90	-40.00	-17.34	Horizontal
2	11043.00	-56.25	RMS	38.90	-49.48	0.28	-95.23	49.28	-40.00	-16.25	Horizontal
3	14725.00	-51.87	RMS	40.65	-45.56	0.42	-95.23	47.85	-40.00	-11.87	Horizontal



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_00993_231124 Vertical

: SA n48 MIMO 20M Ch646000 1RB1 QPSK

	Freq MHz	Level dBm	Detector	Ant Amp\Cb Filter		EIRPCF	Readin g	Limit		Margin	Pol
				Factor	1						
1	7362.00	-57.48	RMS	36.83	-51.67	0.83	-95.23	51.76	-40.00	-17.48	Vertical
2	11043.00	-56.44	RMS	38.90	-49.48	0.28	-95.23	49.09	-40.00	-16.44	Vertical
3	14725.00	-52.06	RMS	40.65	-45.56	0.42	-95.23	47.66	-40.00	-12.06	Vertical

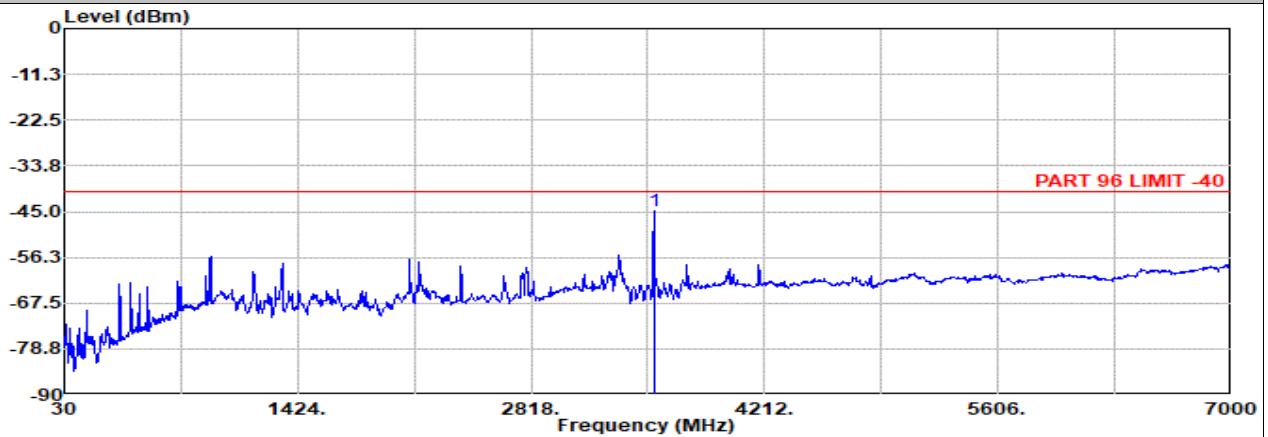


<MIMO2 Antenna>

Part 96 Mode 91

NR SA n48 20M Ch637334 1RB1 BPSK

L



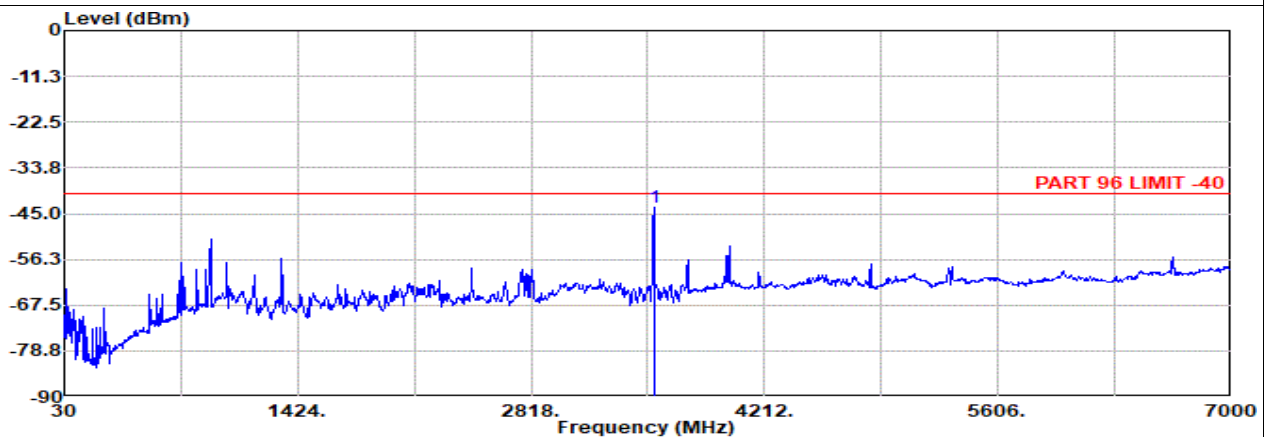
Site : 03CH12-HY

Condition: PART 96 LIMIT -40 3m 9120D-02114-240711 Horizontal

: SA n48 20M Ch637334 1RB1 BPSK

: #1 is fundamental signal which can be ignored.

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol
				Factor	1					
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB
1	3551.00	-44.81	RMS	29.60	-57.17	0.54	-95.23	77.45	-40.00	-4.81 Horizontal



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 3m 9120D-02114-240711 Vertical

: SA n48 20M Ch637334 1RB1 BPSK

: #1 is fundamental signal which can be ignored.

	Freq	Level	Detector	Ant Amp\Cb Filter		EIRPCF	Readin	Limit	Margin	Pol
				Factor	1					
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB
1	3551.00	-43.60	RMS	29.60	-57.17	0.54	-95.23	78.66	-40.00	-3.60 Vertical

Remark: #1 is fundamental signal which can be ignored.