



FCC RADIO TEST REPORT

FCC ID : 2AQ68W696Y
Equipment : 5G WWAN Module
Brand Name : Foxconn
Model Name : T99W696
Applicant : Hon Lin Technology Co., Ltd.
11F, No.32, Jihu Rd., Neihu Dist., Taipei City 114
Manufacturer : Lenovo Ireland International Limited
Viscount House, 6/7 Fitzwilliam Square East, Dublin,
D02 Y447, Ireland
Standard : FCC 47 CFR Part 2, 96

Equipment: Foxconn T99W696 tested inside of Lenovo Notebook Computer

The product was received on Dec. 10, 2025 and testing was performed from Jan. 14, 2026 to Mar. 04, 2026. We, Sporton International Inc. Wensan 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. Wensan Laboratory, the test report shall not be reproduced except in full.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. Wensan Laboratory



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History of this test report

Report No.	Version	Description	Issue Date
FG5D1030D	01	Initial issue of report	Mar. 10, 2026



Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1046	Conducted Output Power	Pass	-
-	ANSI C63.26	Peak-to-Average Ratio	Pass	See Note
3.3	§96.41	Effective Isotropic Radiated Power	Pass	-
		Power Density	Pass	-
-	§2.1049	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	§2.1053 §96.41	Radiated Spurious Emission	Pass	-

Remark:

- For host device, Radiated Spurious Emission, Effective Radiated Power and Equivalent Isotropic Radiated Power are verified and comply with the limit in this test report.
- For host device, the Conducted Output Power is no difference after compared to module (Model: Foxconn T99W696)

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: Aya Yang

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	5G WWAN Module
Brand Name	Foxconn
Model Name	T99W696
FCC ID	2AQ68W696Y
Sample 1	EUT with Host 1
Sample 2	EUT with Host 2
EUT Stage	Production Unit

Remark:

1. The above EUT's information was declared by manufacturer.
2. Equipment: Foxconn T99W696 tested inside of Lenovo Notebook Computer.

The product was installed into Notebook Computer (Brand Name: Lenovo, Model Name: TP00171A) during test, and the host information was recorded in the following table.

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

Support band and evaluated information	
Supported band	B48, B48C
Evaluated and Tested band	B48, B48C

TDD band Power Class		
	PC3	PC2
B48 / B48C	V	-

WWAN Antenna Information				
Main Antenna	Manufacturer	Amphenol Taiwan Corporation	Peak gain (dBi)	LTE Band 48 : -1.41
	Part number	SA31Q71827	Type	PIFA
	Manufacturer	Speed	Peak gain (dBi)	LTE Band 48 : -1.41
	Part number	SA31Q71828	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	LTE Band 48: 3550 MHz ~ 3700 MHz
Rx Frequency	LTE Band 48: 3550 MHz ~ 3700 MHz
Bandwidth	LTE Band 48: 5MHz / 10MHz / 15MHz / 20MHz
Type of Modulation	QPSK / 16QAM / 64QAM / 256QAM

1.3 Modification of EUT

No modifications made to the EUT during the testing.

1.4 Testing Site

Test Site	Sporton International Inc. Wensan Laboratory	
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855	
Test Site No.	Sporton Site No.	
	TH05-HY	03CH12-HY
Test Engineer	Yuki Chen	Gerry Wei, Tim Lee and Wilson Wu
Temperature (°C)	22.3~22.9	21.9~23.4
Relative Humidity (%)	53.2~55.5	53.2~59.3

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

FCC Designation No.: TW3786

1.5 Applied Standards

According to the specifications declared by 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 Power Meas. License Digital Systems v03r01
- ♦ FCC KDB 940660 D01 Part 96 CBRS Eqpt v03
- ♦ FCC KDB 412172 D01 Determining ERP and EIRP
- ♦ 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 v03r01 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 three orthogonal axis (X: flat, Y: portrait, Z: landscape), and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and only the worst case emissions were reported in this report.

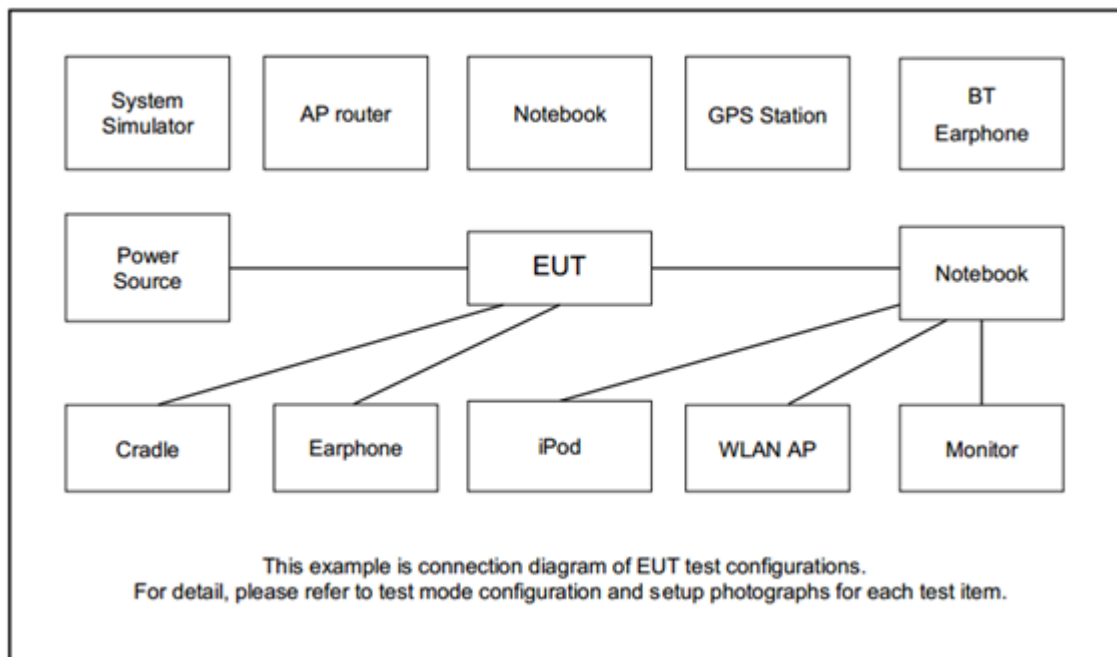
Modulation Type	Modulation
A	QPSK
B	16QAM
C	64QAM
D	256QAM

Test Item	Modulation Type	Bandwidth	RB Size	Channel
Conducted Power	A, B, C, D	All	1, Half, Full	L, M, H
EIRP/ ERP	A, B, C, D	All	1, Half, Full	L, M, H
RSE	A	20 MHz	1RB	Remark 5

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 LTE B48 support SISO Mode Antenna Main and ENDC Antenna MIMO2, Radiated Spurious Emission is full test. Conducted test items are verified and the worst case is Antenna Main, Therefore, the report only performed Antenna Main test results.
5. Based on the module report RSE test results, verify the worst channel.

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	Unshielded, 1.8 m
2.	System Simulator	Anritsu	MT8000A	N/A	N/A	Unshielded, 1.8 m
3.	Earphone	Apple	N/A	N/A	Shielded, 1.2m	N/A

2.4 Frequency List of Low/Middle/High Channels

LTE Band 48 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	55340	55990	56640
	Frequency	3560	3625	3690
15	Channel	55315	55990	56665
	Frequency	3557.5	3625	3692.5
10	Channel	55290	55990	56690
	Frequency	3555	3625	3695
5	Channel	55265	55990	56715
	Frequency	3552.5	3625	3697.5



LTE Band 48C Channel and Frequency List_CA					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	55340	55891	56442
		Frequency	3560	3615.1	3670.2
	SCC	Channel	55538	56089	56640
		Frequency	3579.8	3634.9	3690.0
20 + 15	PCC	Channel	55340	55916	56491
		Frequency	3560	3617.6	3675.1
	SCC	Channel	55511	56087	56662
		Frequency	3577.1	3634.7	3692.2
15 + 20	PCC	Channel	55318	55893	56469
		Frequency	3557.8	3615.3	3672.9
	SCC	Channel	55489	56064	56640
		Frequency	3574.9	3632.4	3690.0
20 + 10	PCC	Channel	55340	55941	56541
		Frequency	3560	3620.1	3680.1
	SCC	Channel	55484	56085	56685
		Frequency	3574.4	3634.5	3694.5
10 + 20	PCC	Channel	55295	55896	56496
		Frequency	3555.5	3615.6	3675.6
	SCC	Channel	55439	56040	56640
		Frequency	3569.9	3630	3690
20 + 5	PCC	Channel	55340	55965	56590
		Frequency	3560	3622.5	3685
	SCC	Channel	55457	56082	56707
		Frequency	3571.7	3634.2	3696.7
5 + 20	PCC	Channel	55273	55896	56523
		Frequency	3553.3	3615.6	3678.3
	SCC	Channel	55390	56015	56640
		Frequency	3565	3627.5	3690.0

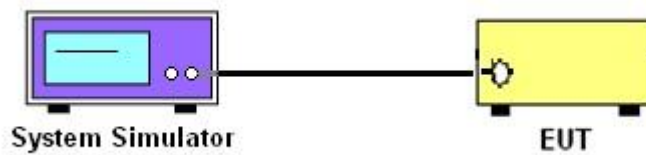
3 Conducted Test Items

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 Measurement

3.2.1 Description of the Conducted Output Power Measurement

A base station simulator was used to establish communication with the EUT. Its parameters were set to transmit the maximum power on the EUT. 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 base station.
2. Set EUT at maximum power through base station.
3. Select lowest, middle, and highest channels for each band and different modulation.
4. Measure and record the power level from the system simulator.



3.3 EIRP and Power Density

3.3.1 Description of the EIRP and Power Density Measurement

The EIRP of mobile transmitters must not exceed 23 dBm /10 megahertz for LTE Band 48.

The testing follows ANSI C63.26-2015 Section 5.2.5.5.

According to KDB 412172 D01 Power Approach,

$EIRP = P_T + G_T - LC$, where

P_T = transmitter output power in dBm

G_T = gain of the transmitting antenna in dBi

LC = 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

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)

Determine the EIRP by adding the effective antenna gain to the measured average conducted power level.

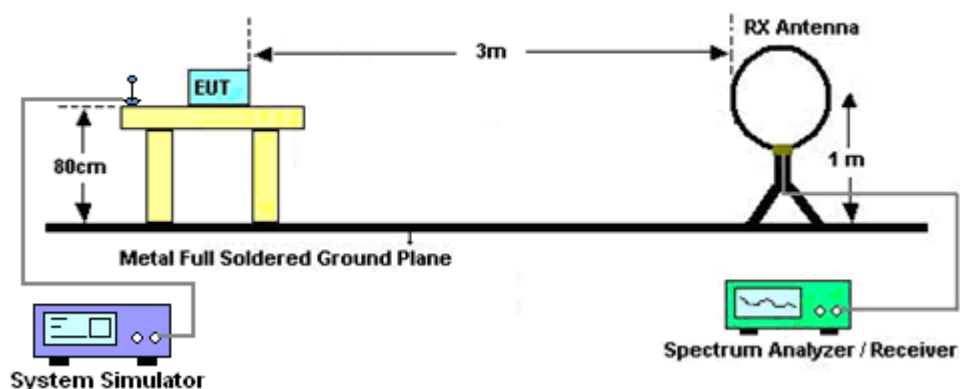
4 Radiated Test Items

4.1 Measuring Instruments

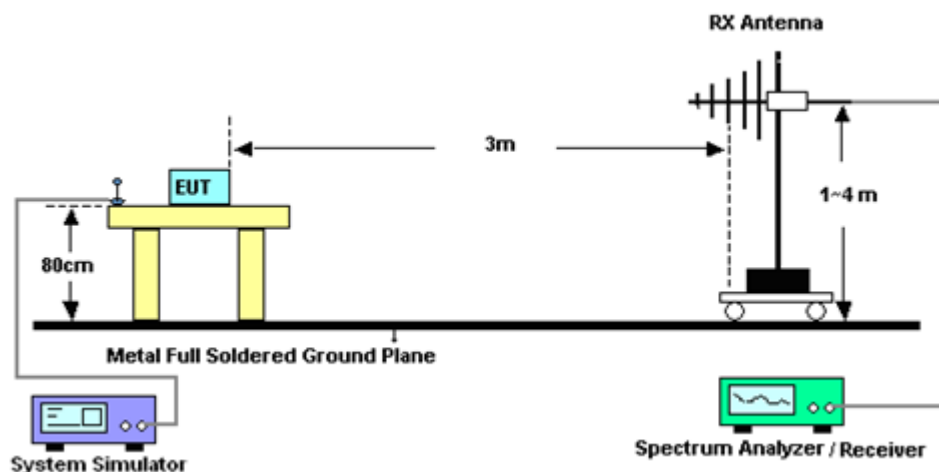
See list of measuring instruments of this test report.

4.2 Test Setup

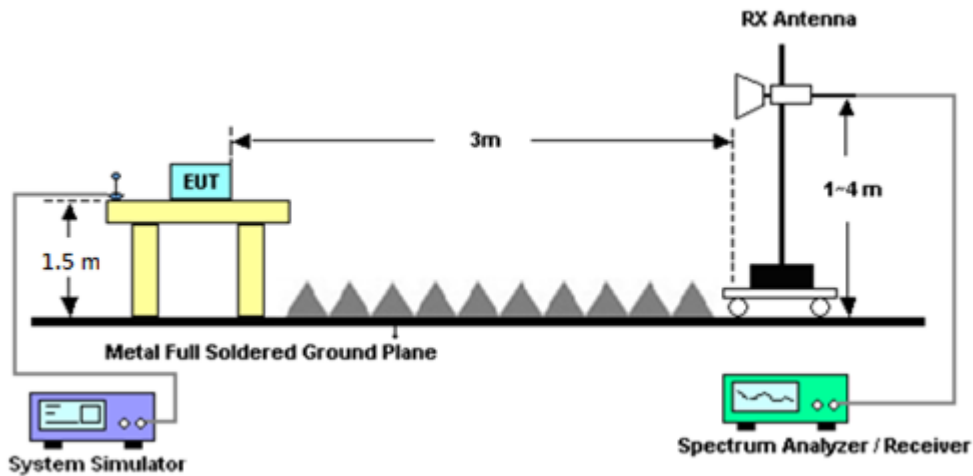
For radiated test below 30MHz



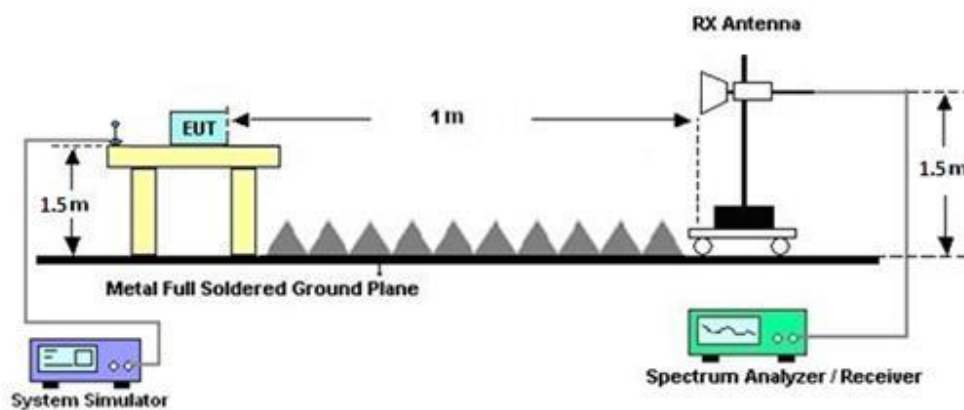
For radiated test from 30MHz to 1GHz



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

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 5.5.7 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 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. Make the measurement with the spectrum analyzer's RBW = 1MHz, VBW = 3MHz, taking the record of maximum spurious emission.
7. 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
8. Field Strength Level (dBm) = Spectrum Reading (dBm) + Antenna Factor + Cable Loss + Read Level - Preamp Factor.
9. ERP (dBm) = EIRP (dBm) - 2.15
10. 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	Mar. 06, 2025	Jan. 14, 2026~ Feb. 20, 2026	Mar. 05, 2026	Radiation (03CH12-HY)
Loop Antenna	Rohde & Schwarz	HFH2-Z2E	101108	9 kHz~30 MHz	Dec. 11, 2025	Jan. 14, 2026~ Feb. 20, 2026	Dec. 10, 2026	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01 N-06	37059 & 01	30MHz~1GHz	Nov. 26, 2025	Jan. 14, 2026~ Feb. 20, 2026	Nov. 25, 2026	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBE CK	BBHA 9120 D	9120D-021 14	1GHz~18GHz	Jul. 02, 2025	Jan. 14, 2026~ Feb. 20, 2026	Jul. 01, 2026	Radiation (03CH12-HY)
Amplifier	EMCI	EMC051845S E	980729	1-18GHz	Dec. 17, 2025	Jan. 14, 2026~ Feb. 20, 2026	Dec. 16, 2026	Radiation (03CH12-HY)
Spectrum Analyzer	Agilent	N9010A	MY534701 18	10Hz~44GHz	Sep. 09, 2025	Jan. 14, 2026~ Feb. 20, 2026	Sep. 08, 2026	Radiation (03CH12-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY532900 53	20Hz~26.5GHz	Sep. 08, 2025	Jan. 14, 2026~ Feb. 20, 2026	Sep. 07, 2026	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBE CK	BBHA 9170	1225	18GHz~40GHz	Jul. 02, 2025	Jan. 14, 2026~ Feb. 20, 2026	Jul. 01, 2026	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 02, 2025	Jan. 14, 2026~ Feb. 20, 2026	Dec. 01, 2026	Radiation (03CH12-HY)
Notch Filter	Wainwright	WLKS1200-1 2SS	SN2	1.2GHz Low Pass Filter	Mar. 12, 2025	Jan. 14, 2026~ Feb. 20, 2026	Mar. 11, 2026	Radiation (03CH12-HY)
Notch Filter	Wainwright	WHKX12-900 -1000-15000- 60SS	SN11	1GHz High Pass Filter	Mar. 12, 2025	Jan. 14, 2026~ Feb. 20, 2026	Mar. 11, 2026	Radiation (03CH12-HY)
Notch Filter	Wainwright	WHKX12-270 0-3000-18000 -60ST	SN2	3GHz High Pass Filter	Mar. 12, 2025	Jan. 14, 2026~ Feb. 20, 2026	Mar. 11, 2026	Radiation (03CH12-HY)
Notch Filter	Wainwright	WHKX8-5872. 5-6750-18000 -40ST	SN2	6.75GHz High Pass Filter	Mar. 12, 2025	Jan. 14, 2026~ Feb. 20, 2026	Mar. 11, 2026	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803955/2	30MHz~40GHz	Oct. 31, 2025	Jan. 14, 2026~ Feb. 20, 2026	Oct. 30, 2026	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Oct. 31, 2025	Jan. 14, 2026~ Feb. 20, 2026	Oct. 30, 2026	Radiation (03CH12-HY)
RF Cable	EMCI	EMC101Y-KM -KM-1000	240905	30MHz~40GHz	Oct. 31, 2025	Jan. 14, 2026~ Feb. 20, 2026	Oct. 30, 2026	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102/SUCOFL EX 104	EC-A5-300 -5757,805 935/4	9kHz~30MHz	Oct. 01, 2025	Jan. 14, 2026~ Feb. 20, 2026	Sep. 30, 2026	Radiation (03CH12-HY)
Hygrometer	TECPEL	DTM-303B	TP210090	N/A	Aug. 26, 2025	Jan. 14, 2026~ Feb. 20, 2026	Aug. 25, 2026	Radiation (03CH12-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Jan. 14, 2026~ Feb. 20, 2026	N/A	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500- B	N/A	1m~4m	N/A	Jan. 14, 2026~ Feb. 20, 2026	N/A	Radiation (03CH12-HY)
Radio Communication Analyzer	Anritsu	MT8821C	627227835 3	LTE FDD/TDD DLCA/ULCA	Oct. 28, 2025	Jan. 14, 2026~ Feb. 20, 2026	Oct. 27, 2026	Radiation (03CH12-HY)
Radio Communication Test Station	Anritsu	MT8000A	626226191 2	N/A	May 07, 2025	Jan. 14, 2026~ Feb. 20, 2026	May 06, 2026	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jan. 14, 2026~ Feb. 20, 2026	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-00098 9	N/A	N/A	Jan. 14, 2026~ Feb. 20, 2026	N/A	Radiation (03CH12-HY)



Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
Radio Communication Analyzer	Anritsu	MT8821C	6262025341	LTE FDD/TDD LTE-2CC ULCA/DLCA	Sep. 16, 2025	Feb. 25, 2026~ Mar. 04, 2026	Sep. 15, 2026	Conducted (TH05-HY)
DC Power Supply	GW Instek	GPE-2323	GET861546	0V~64V ; 0A~6A	Jun. 03, 2025	Feb. 25, 2026~ Mar. 04, 2026	Jun. 02, 2026	Conducted (TH05-HY)
Coupler	MVE	MVE4816	#Z	0.009MHz-18G Hz	Oct. 16, 2025	Feb. 25, 2026~ Mar. 04, 2026	Oct. 15, 2026	Conducted (TH03-HY)
Thermal Chamber	ESPEC	SU-241	92003713	-30°C ~95°C	May. 12, 2025	Feb. 25, 2026~ Mar. 04, 2026	May. 11, 2026	Conducted (TH05-HY)
Power divider	Anritsu	K241C	2143398	9KHz~40GHz	Jun. 13,2025	Feb. 25, 2026~ Mar. 04, 2026	Jun. 12,2026	Conducted (TH05-HY)
Software	Sporton	LTE Conducted Test Tools	N/A	Conducted Test Item	N/A	Feb. 25, 2026~ Mar. 04, 2026	N/A	Conducted (TH05-HY)
Hygrometer	TECPEL	DTM-303B	TP200886	-10 ~ 50°C / 20 ~ 95%RH	Mar. 03,2025	Feb. 25, 2026~ Mar. 04, 2026	Mar. 02,2026	Conducted (TH05-HY)

6 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	6.5 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 6 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.9 dB
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Uncertainty of Radiated Emission Measurement (6 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	5.7 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2Uc(y)$)	4.9 dB
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Appendix A. Test Results of Conducted Test

Conducted Output Power (Average power and EIRP)

Part 96 LTE Band 48 Maximum Average Power [dBm] (GT - LC = -1.41 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	20.03	20.44	20.72	19.31	0.0853
20	1	49		20.08	20.55	20.71		
20	1	99		20.02	20.54	20.69		
20	50	0		19.04	19.53	19.80		
20	50	24		19.07	19.60	19.75		
20	50	50		19.07	19.64	19.76		
20	100	0		19.08	19.59	19.73		
20	1	0	16-QAM	19.02	19.50	19.68	18.34	0.0682
20	1	49		19.09	19.57	19.71		
20	1	99		19.03	19.62	19.75		
20	50	0		18.08	18.50	18.65		
20	50	24		18.05	18.58	18.71		
20	50	50		18.06	18.61	18.76		
20	100	0		18.07	18.59	18.71		
20	1	0	64-QAM	18.02	18.47	18.62	17.34	0.0542
20	1	49		18.05	18.52	18.69		
20	1	99		18.02	18.51	18.75		
20	50	0		17.02	17.51	17.65		
20	50	24		17.08	17.58	17.70		
20	50	50		17.05	17.61	17.73		
20	100	0		17.07	17.56	17.71		
20	1	0	256-QAM	15.08	15.40	15.60	14.33	0.0271
20	1	49		15.03	15.58	15.71		
20	1	99		15.04	15.53	15.65		
20	50	0		15.06	15.51	15.65		
20	50	24		15.18	15.56	15.73		
20	50	50		15.15	15.57	15.74		
20	100	0		15.13	15.56	15.69		
Limit	EIRP < 23dBm/10MHz			Result			Pass	

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

Part 96 LTE Band 48 Maximum Average Power [dBm] (GT - LC = -1.41 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	20.00	20.32	20.64	19.23	0.0838
15	1	37		20.00	20.40	20.64		
15	1	74		20.00	20.43	20.61		
15	36	0		19.00	19.45	19.73		
15	36	20		19.00	19.51	19.63		
15	36	39		19.03	19.50	19.69		
15	75	0		19.02	19.45	19.68		
15	1	0	16-QAM	19.00	19.44	19.61	18.23	0.0665
15	1	37		19.01	19.48	19.61		
15	1	74		19.01	19.56	19.64		
15	36	0		18.00	18.38	18.56		
15	36	20		18.02	18.53	18.60		
15	36	39		18.00	18.50	18.72		
15	75	0		18.00	18.55	18.60		
15	1	0	64-QAM	18.01	18.33	18.55	17.30	0.0537
15	1	37		18.00	18.49	18.68		
15	1	74		18.02	18.46	18.71		
15	36	0		17.00	17.50	17.58		
15	36	20		17.00	17.51	17.68		
15	36	39		17.01	17.52	17.66		
15	75	0		17.03	17.46	17.69		
15	1	0	256-QAM	15.02	15.36	15.56	14.27	0.0267
15	1	37		15.00	15.43	15.60		
15	1	74		15.00	15.39	15.52		
15	36	0		15.04	15.47	15.61		
15	36	20		15.13	15.49	15.68		
15	36	39		15.07	15.46	15.61		
15	75	0		15.09	15.45	15.59		
Limit	EIRP < 23dBm/10MHz			Result			Pass	

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

Part 96 LTE Band 48 Maximum Average Power [dBm] (GT - LC = -1.41 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	20.00	20.39	20.65	19.26	0.0843
10	1	25		20.04	20.43	20.67		
10	1	49		20.01	20.49	20.65		
10	25	0		19.00	19.46	19.73		
10	25	12		19.02	19.57	19.60		
10	25	25		19.06	19.51	19.64		
10	50	0		19.00	19.48	19.59		
10	1	0	16-QAM	19.00	19.43	19.54	18.26	0.0670
10	1	25		19.00	19.54	19.63		
10	1	49		19.00	19.54	19.67		
10	25	0		18.00	18.47	18.63		
10	25	12		18.00	18.52	18.60		
10	25	25		18.00	18.54	18.63		
10	50	0		18.00	18.49	18.67		
10	1	0	64-QAM	18.01	18.46	18.53	17.22	0.0527
10	1	25		18.01	18.45	18.62		
10	1	49		18.00	18.44	18.63		
10	25	0		17.00	17.40	17.64		
10	25	12		17.00	17.57	17.58		
10	25	25		17.01	17.58	17.72		
10	50	0		17.03	17.49	17.59		
10	1	0	256-QAM	15.01	15.28	15.54	14.26	0.0267
10	1	25		15.01	15.56	15.67		
10	1	49		15.01	15.42	15.50		
10	25	0		15.00	15.40	15.60		
10	25	12		15.15	15.44	15.61		
10	25	25		15.12	15.48	15.61		
10	50	0		15.11	15.43	15.67		
Limit	EIRP < 23dBm/10MHz			Result			Pass	

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

Part 96 LTE Band 48 Maximum Average Power [dBm] (GT - LC = -1.41 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	20.00	20.33	20.66	19.27	0.0845
5	1	12		20.00	20.45	20.68		
5	1	24		20.01	20.40	20.63		
5	12	0		19.01	19.52	19.72		
5	12	7		19.00	19.52	19.70		
5	12	13		19.00	19.52	19.70		
5	25	0		19.01	19.48	19.60		
5	1	0	16-QAM	19.01	19.47	19.53	18.32	0.0679
5	1	12		19.06	19.55	19.67		
5	1	24		19.01	19.52	19.73		
5	12	0		18.00	18.47	18.62		
5	12	7		18.01	18.46	18.67		
5	12	13		18.02	18.52	18.62		
5	25	0		18.01	18.52	18.58		
5	1	0	64-QAM	18.00	18.38	18.55	17.29	0.0536
5	1	12		18.01	18.50	18.60		
5	1	24		18.01	18.48	18.70		
5	12	0		17.00	17.49	17.60		
5	12	7		17.02	17.46	17.56		
5	12	13		17.01	17.50	17.69		
5	25	0		17.04	17.54	17.59		
5	1	0	256-QAM	15.00	15.33	15.56	14.28	0.0268
5	1	12		15.02	15.44	15.58		
5	1	24		15.01	15.49	15.56		
5	12	0		15.00	15.43	15.53		
5	12	7		15.08	15.46	15.64		
5	12	13		15.12	15.46	15.69		
5	25	0		15.00	15.53	15.66		
Limit	EIRP < 23dBm/10MHz			Result			Pass	

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

Appendix A. Test Results of Conducted Test

Conducted Output Power (Average power and EIRP)

Part 96 LTE Band 48C_CA Maximum Average Power [dBm] (GT - LC = -1.41 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
20+20	1	99	1	0	QPSK	20.45	20.73	20.73	19.32	0.0855
20+20	1	99	1	0	16-QAM	20.09	20.39	20.37	18.98	0.0791
20+15	1	99	1	0	QPSK	20.46	20.78	20.83	19.42	0.0875
20+15	1	99	1	0	16-QAM	20.05	20.40	20.45	19.04	0.0802
15+20	1	74	1	0	QPSK	20.43	20.73	20.80	19.39	0.0869
15+20	1	74	1	0	16-QAM	20.02	20.33	20.42	19.01	0.0796
Limit	EIRP < 23dBm/10MHz					Result			Pass	

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

Part 96 LTE Band 48C_CA Maximum Average Power [dBm] (GT - LC = -1.41 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
20+10	1	99	1	0	QPSK	20.49	20.84	20.91	19.50	0.0891
20+10	1	99	1	0	16-QAM	20.11	20.45	20.52	19.11	0.0815
10+20	1	49	1	0	QPSK	20.40	20.73	20.85	19.44	0.0879
10+20	1	49	1	0	16-QAM	19.97	20.40	20.51	19.10	0.0813
20+5	1	99	1	0	QPSK	20.55	20.86	20.97	19.56	0.0904
20+5	1	99	1	0	16-QAM	20.13	20.52	20.61	19.20	0.0832
Limit	EIRP < 23dBm/10MHz					Result			Pass	

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

Part 96 LTE Band 48C_CA Maximum Average Power [dBm] (GT - LC = -1.41 dB)										
BW [MHz]	PCC		SCC		Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
	RB Size	RB Offset	RB Size	RB Offset						
5+20	1	24	1	0	QPSK	20.39	20.80	20.92	19.51	0.0893
5+20	1	24	1	0	16-QAM	20.01	20.42	20.51	19.10	0.0813
Limit	EIRP < 23dBm/10MHz					Result			Pass	

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



Appendix B. Radiated Spurious Emission Test Data

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
1	Part 96	LTE B48	M	7232	-43.43	RMS	37.10	-43.12	0.65	-95.23	57.17	-40.00	-3.43	H	Main
2	Part 96	EN-DC B48+n5	M	7232	-50.54	RMS	37.10	-43.12	0.65	-95.23	50.06	-40.00	-10.54	H	MIMO2+Main
3	Part 96	LTE CA 48C	M	7248	-47.89	RMS	37.10	-43.11	0.62	-95.23	52.73	-40.00	-7.89	V	Main

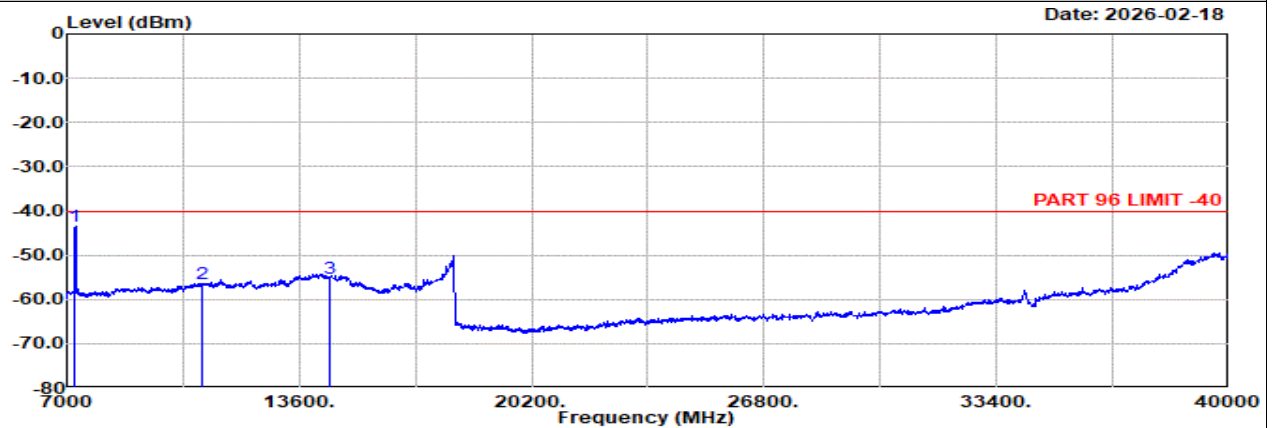


Ant. Main

Part 96 Mode 1

LTE B48 20M Ch55990 1RB0 QPSK

M

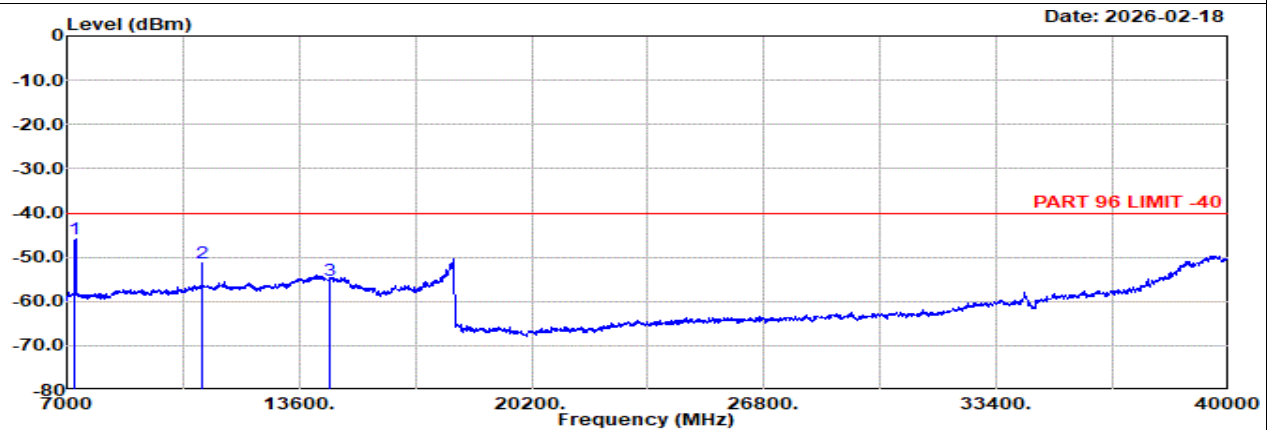


Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_1225_250701 Horizontal

: LTE Band 48 20M Ch55990 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cb 1	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7232.00	-43.43	RMS	37.10	-43.12	0.65	-95.23	57.17	-40.00	-3.43	Horizontal
2	10848.00	-56.38	RMS	39.00	-39.02	0.20	-95.23	38.67	-40.00	-16.38	Horizontal
3	14464.00	-55.15	RMS	40.58	-35.59	0.05	-95.23	35.04	-40.00	-15.15	Horizontal



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_1225_250701 Vertical

: LTE Band 48 20M Ch55990 1RB0 QPSK

	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	-45.85	RMS	37.10	-43.12	0.65	-95.23	54.75	-40.00	-5.85	Vertical
2	10848.00	-51.45	RMS	39.00	-39.02	0.20	-95.23	43.60	-40.00	-11.45	Vertical
3	14464.00	-55.10	RMS	40.58	-35.59	0.05	-95.23	35.09	-40.00	-15.10	Vertical

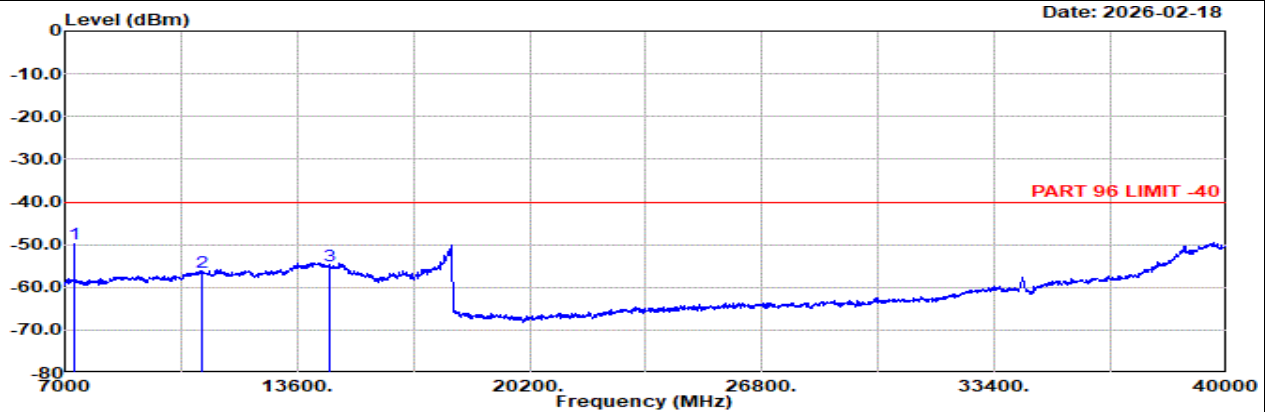


Ant. Main

Part 96 Mode 3

LTE CA 48C 20M + 20M Ch55891 1RB99 QPSK + Ch56089 1RB0 QPSK

M



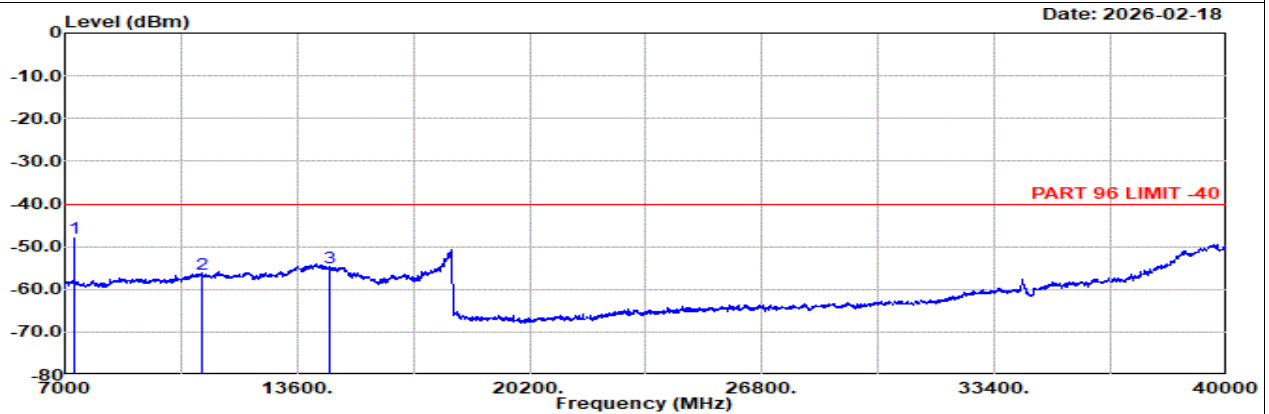
Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_1225_250701 Horizontal

: LTE Band 48 20M Ch55891 1RB99 QPSK

: LTE Band 48 20M Ch56089 1RB0 QPSK

	Freq	Level	Detector	Ant	Amp\Cb	Filter	EIRPCF	Readin	Limit	Margin	Pol
	MHz	dBm		Factor	1	dB		dB	g		
1	7248.00	-49.74	RMS	37.10	-43.11	0.62	-95.23	50.88	-40.00	-9.74	Horizontal
2	10872.00	-56.51	RMS	39.00	-38.96	0.21	-95.23	38.47	-40.00	-16.51	Horizontal
3	14496.00	-54.88	RMS	40.78	-35.60	0.05	-95.23	35.12	-40.00	-14.88	Horizontal



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 1m SHF_1225_250701 Vertical

: LTE Band 48 20M Ch55891 1RB99 QPSK

: LTE Band 48 20M Ch56089 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cb 1	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB		dB	dBuV	dBm	dB	
1	7248.00	-47.89	RMS	37.10	-43.11	0.62	-95.23	52.73	-40.00	-7.89	Vertical
2	10872.00	-56.40	RMS	39.00	-38.96	0.21	-95.23	38.58	-40.00	-16.40	Vertical
3	14496.00	-55.02	RMS	40.78	-35.60	0.05	-95.23	34.98	-40.00	-15.02	Vertical

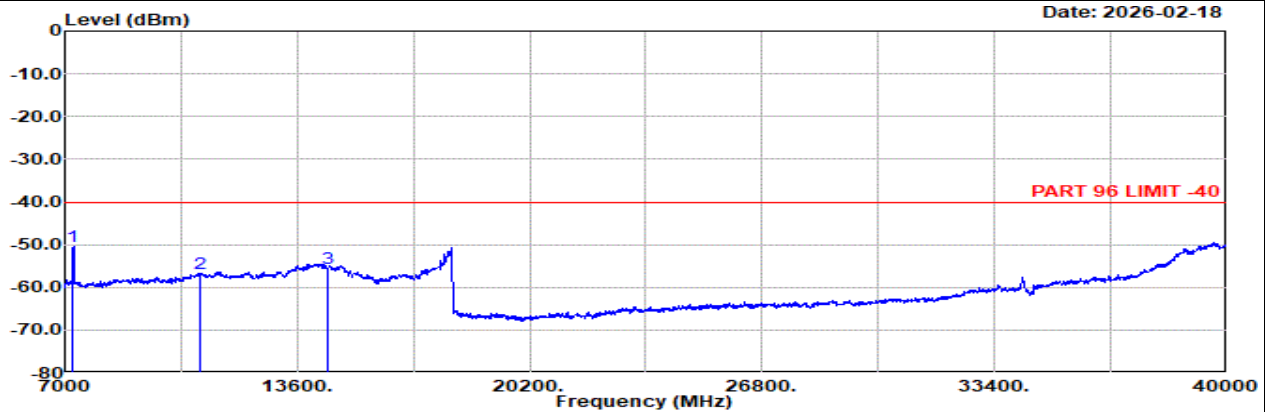


Ant. MIMO2+Main

Part 96 Mode 2

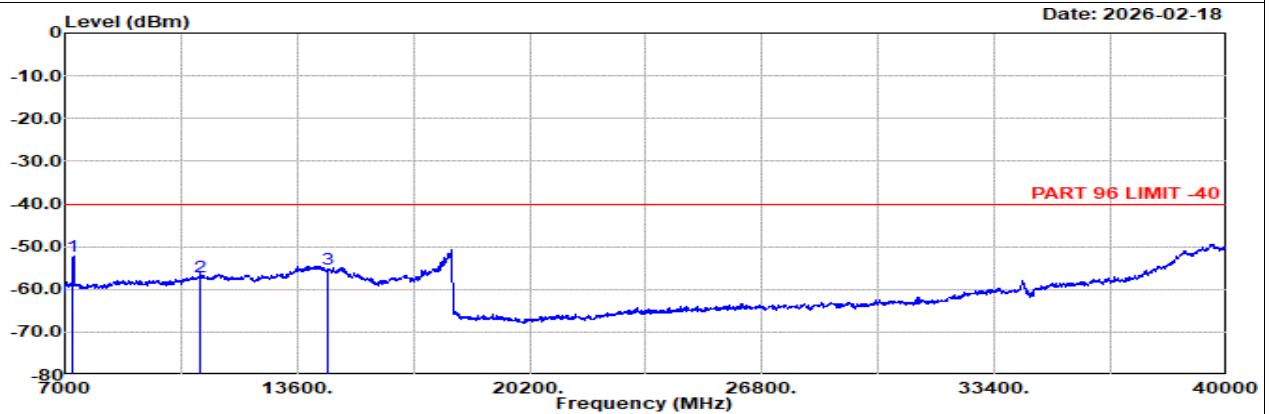
EN-DC B48+n5 20M + 20M Ch55990 1RB0 QPSK + Ch167300 1RB1 BPSK

M



Site : 03CH12-HY
Condition: PART 96 LIMIT -40 1m SHF_1225_250701 Horizontal
: LTE Band 48 20M Ch55990 1RB0 QPSK
: SA n5 20M Ch167300 1RB1 BPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter 1		EIRPCF	Readin g	Limit		Margin	Pol
	MHz	dBm			dB/m	dB			dBuV	dBm	dB	
1	7232.00	-50.54	RMS		37.10	-43.12	0.65	-95.23	50.06	-40.00	-10.54	Horizontal
2	10848.00	-56.80	RMS		39.00	-39.02	0.20	-95.23	38.25	-40.00	-16.80	Horizontal
3	14464.00	-55.55	RMS		40.58	-35.59	0.05	-95.23	34.64	-40.00	-15.55	Horizontal



Site : 03CH12-HY
Condition: PART 96 LIMIT -40 1m SHF_1225_250701 Vertical
: LTE Band 48 20M Ch55990 1RB0 QPSK
: SA n5 20M Ch167300 1RB1 BPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter 1		EIRPCF	Readin g	Limit		Margin	Pol
	MHz	dBm			dB/m	dB			dBuV	dBm	dB	
1	7232.00	-52.11	RMS		37.10	-43.12	0.65	-95.23	48.49	-40.00	-12.11	Vertical
2	10848.00	-57.19	RMS		39.00	-39.02	0.20	-95.23	37.86	-40.00	-17.19	Vertical
3	14464.00	-55.20	RMS		40.58	-35.59	0.05	-95.23	34.99	-40.00	-15.20	Vertical

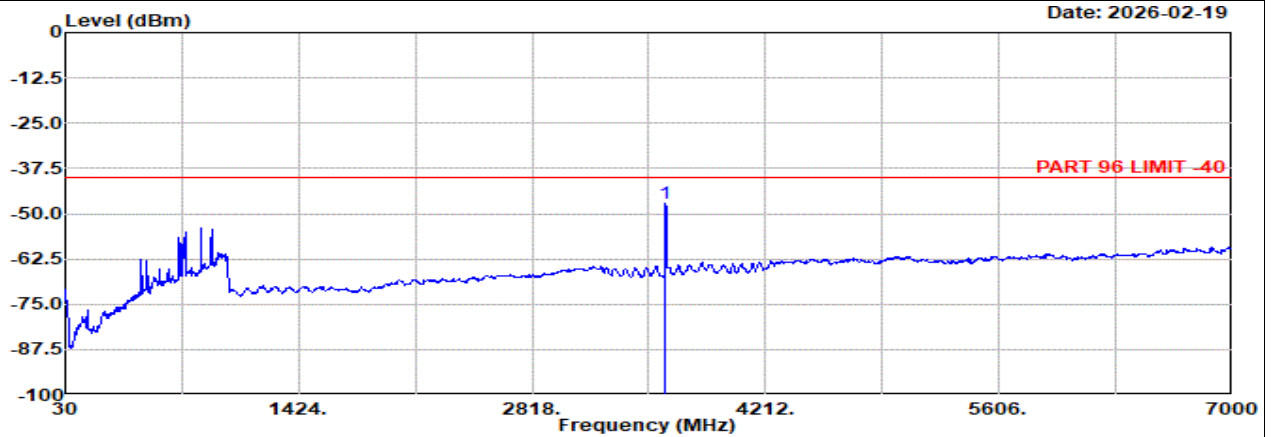


Ant. Main

Part 96 Mode 1

LTE B48 20M Ch55990 1RB0 QPSK

M



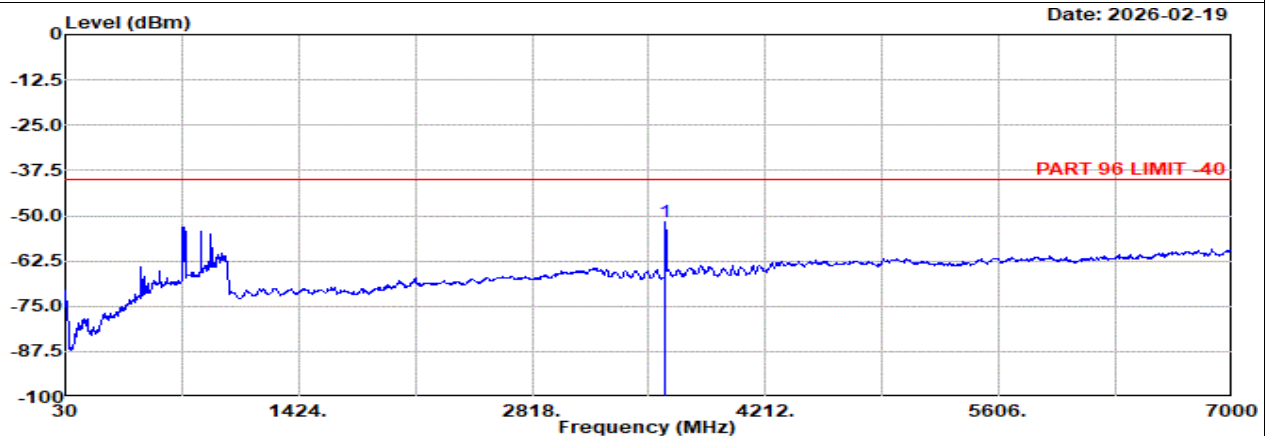
Site : 03CH12-HY

Condition: PART 96 LIMIT -40 3m 9120D-02114-250702 Horizontal

: LTE Band 48 20M Ch55990 1RB0 QPSK

: #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	3616.09	-47.02	RMS	29.63	-46.43	1.18	-95.23	63.83	-40.00	-7.02 Horizontal



Site : 03CH12-HY

Condition: PART 96 LIMIT -40 3m 9120D-02114-250702 Vertical

: LTE Band 48 20M Ch55990 1RB0 QPSK

: #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	3616.09	-51.61	RMS	29.63	-46.43	1.18	-95.23	59.24	-40.00	-11.61 Vertical