



FCC RADIO TEST REPORT

FCC ID : 2AJN7-TP00164A
Equipment : Notebook Computer
Brand Name : Lenovo
Model Name : TP00164A
Applicant : LC Future Center Limited Taiwan Branch
7F., No.780, Beian Rd., Zhongshan Dist., Taipei 104, Taiwan
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: Rolling Wireless RW350R-GL tested inside of Lenovo Notebook Computer.

The product was received on Dec. 16, 2024 and testing was performed from Jan. 03, 2025 to Feb. 05, 2025. 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.

Louis Wu

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
FG4D1633D	01	Initial issue of report	Mar. 03, 2025

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	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	§2.1053 §96.41	Radiated Spurious Emission	Pass	-

Note:

- For host device, Radiated Spurious Emission and Effective 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: RW350R-GL)

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: Michelle Chen

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
Equipment	Notebook Computer
Brand Name	Lenovo
Model Name	TP00164A
FCC ID	2AJN7-TP00164A
Sample 1	EUT with AWAN Antenna
Sample 2	EUT with Luxshare-ICT Antenna
Integrated WLAN Module	Brand Name: Intel Model Name: AX211D2W FCC ID: PD9AX211D2
Integrated WLAN Module	Brand Name: Intel Model Name: BE201D2W FCC ID: PD9BE201D2
Integrated NFC Module	Brand Name: Foxconn Model Name: T77H747
EUT supports Radios application	WCDMA/HSPA/LTE/5G NR/GNSS/NFC WLAN 11a/b/g/n HT20/HT40 WLAN 11ac VHT20/VHT40/VHT80/VHT160 WLAN 11ax HE20/HE40/HE80/HE160 WLAN 11be EHT20/EHT40/EHT80/EHT160/EHT320 Bluetooth BR/EDR/LE
EUT Stage	Production Unit

Remark:

1. The above EUT's information was declared by manufacturer.
2. Equipment: Rolling Wireless RW350R-GL tested inside of Lenovo Notebook Computer.

Support band and evaluated information	
Supported band	B42, B43, B48
Evaluated and Tested band	B42, B43, B48
Main Antenna	B42, B48
MIMO 2 Antenna	B42, B43, B48

TDD band Power Class		
	PC3	PC2
B42	V	-
B43	V	-
B48	V	-

WWAN Antenna Information				
Main Antenna	Manufacturer	AWAN	Peak gain (dBi)	LTE Band 42 : -0.41 LTE Band 48 : -1.40
	Part number	DC330028K00	Type	PIFA
	Manufacturer	Luxshare-ICT	Peak gain (dBi)	LTE Band 42 : -0.41 LTE Band 48 : -1.40
	Part number	DC330028G00	Type	PIFA
MIMO2 Antenna	Manufacturer	AWAN	Peak gain (dBi)	LTE Band 42 : 0.98 LTE Band 43 : 0.98 LTE Band 48 : 0.95
	Part number	DC330028K00	Type	PIFA
	Manufacturer	Luxshare-ICT	Peak gain (dBi)	LTE Band 42 : 0.98 LTE Band 43 : 0.98 LTE Band 48 : 0.95
	Part number	DC330028G00	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 42: 3400 MHz ~ 3600 MHz LTE Band 43: 3600 MHz ~ 3800 MHz LTE Band 48: 3550 MHz ~ 3700 MHz
Rx Frequency	LTE Band 42: 3400 MHz ~ 3600 MHz LTE Band 43: 3600 MHz ~ 3800 MHz LTE Band 48: 3550 MHz ~ 3700 MHz
Bandwidth	LTE Band 42: 5MHz / 10MHz / 15MHz / 20MHz LTE Band 43: 5MHz / 10MHz / 15MHz / 20MHz LTE Band 48: 5MHz / 10MHz / 15MHz / 20MHz
Maximum Output Power to Antenna	<Main Antenna>: LTE Band 42: 21.81 dBm LTE Band 48: 21.14 dBm <MIMO2 Antenna>: LTE Band 42: 21.81 dBm LTE Band 42C: 22.10 dBm LTE Band 43: 21.79 dBm LTE Band 48: 21.13 dBm LTE Band 48C: 20.29 dBm
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. 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	Yuki Chen
Temperature (°C)	22.3~22.9
Relative Humidity (%)	53.2~55.5

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	Jack Cheng, 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 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 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

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.

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..

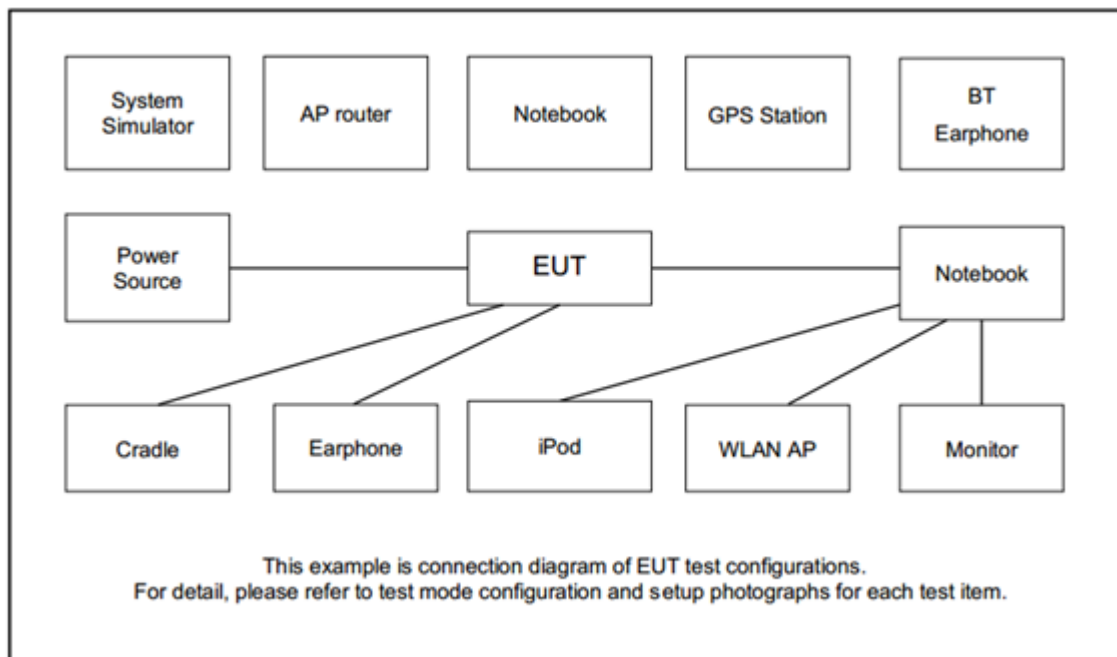
Modulation Type	Modulation
A	QPSK
B	16QAM
C	64QAM
D	256QAM

Test Item	Modulation Type	Bandwidth	RB Size	Channel
Conducted Power	A, B	All	1RB	L, M, H
EIRP	A, B	All	1RB	L, M, H
RSE	A	20 MHz	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 QPSK & 16QAM, the maximum power of QPSK & 16QAM is higher than other modulation (64QAM/256QAM), therefore, according to engineering evaluation , we choose higher power (QPSK & 16QAM) to perform tests and show in the report.
5. LTE Band 42 and 48 support antenna Main & antenna MIMO2, this report only presents the worst case for radiated spurious emission.
6. 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	Unshielded, 1.8 m
2.	iPod Earphone	Apple	N/A	Verification	Unshielded, 1.0 m	N/A

2.4 Frequency List of Low/Middle/High Channels

LTE Band 42 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	43190	43340	43490
	Frequency	3560.0	3575.0	3590.0
15	Channel	43165	43340	43515
	Frequency	3557.5	3575.0	3592.5
10	Channel	43140	43340	43540
	Frequency	3555.0	3575.0	3595.0
5	Channel	43115	43340	43565
	Frequency	3552.5	3575.0	3597.5

LTE Band 43 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	43690	44090	44490
	Frequency	3610.0	3650.0	3690.0
15	Channel	43665	44090	44515
	Frequency	3607.5	3650.0	3692.5
10	Channel	43640	44090	44540
	Frequency	3605.0	3650.0	3695.0
5	Channel	43615	44090	44565
	Frequency	3602.5	3650.0	3697.5

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 42 Channel and Frequency List_CA					
BW [MHz]	Channel/Frequency(MHz)		Lowest	Middle	Highest
20 + 20	PCC	Channel	43190	43241	43292
		Frequency	3560.0	3565.1	3570.2
	SCC	Channel	43388	43439	43490
		Frequency	3579.8	3584.9	3590.0
20 + 15	PCC	Channel	43190	43266	43344
		Frequency	3560.0	3567.6	3575.4
	SCC	Channel	43361	43437	43515
		Frequency	3577.1	3584.7	3592.5
15 + 20	PCC	Channel	43165	43243	43319
		Frequency	3557.5	3565.3	3572.9
	SCC	Channel	43336	43414	43490
		Frequency	3574.6	3582.4	3590.0
20 + 10	PCC	Channel	43190	43291	43396
		Frequency	3560.0	3570.1	3580.6
	SCC	Channel	43334	43435	43540
		Frequency	3574.4	3584.5	3595.0
10 + 20	PCC	Channel	43140	43246	43346
		Frequency	3555.0	3565.6	3575.6
	SCC	Channel	43284	43390	43490
		Frequency	3569.4	3580.0	3590.0
20 + 5	PCC	Channel	43190	43315	43448
		Frequency	3560.0	3572.5	3585.8
	SCC	Channel	43307	43432	43565
		Frequency	3571.7	3584.2	3597.5
5 + 20	PCC	Channel	43115	43248	43373
		Frequency	3552.5	3565.8	3578.3
	SCC	Channel	43232	43365	43490
		Frequency	3564.2	3577.5	3590.0

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

3.3.1 Description of the EIRP 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,

$EIRP = PT + GT - LC$, where

PT = transmitter output power in dBm

GT = 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.

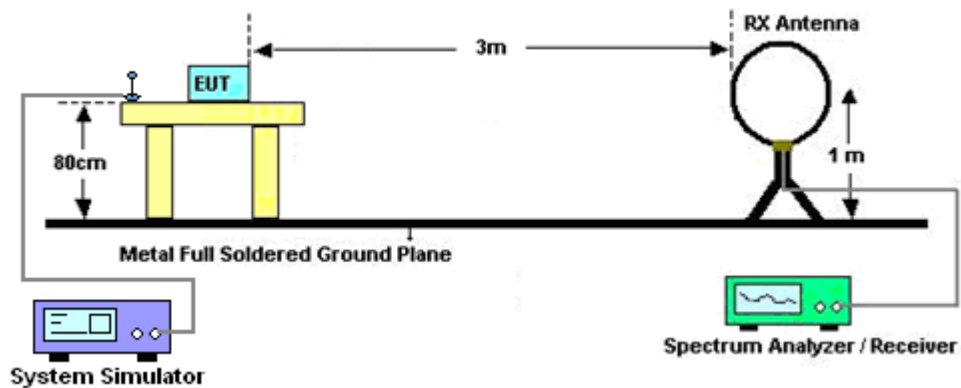
4 Radiated Test Items

4.1 Measuring Instruments

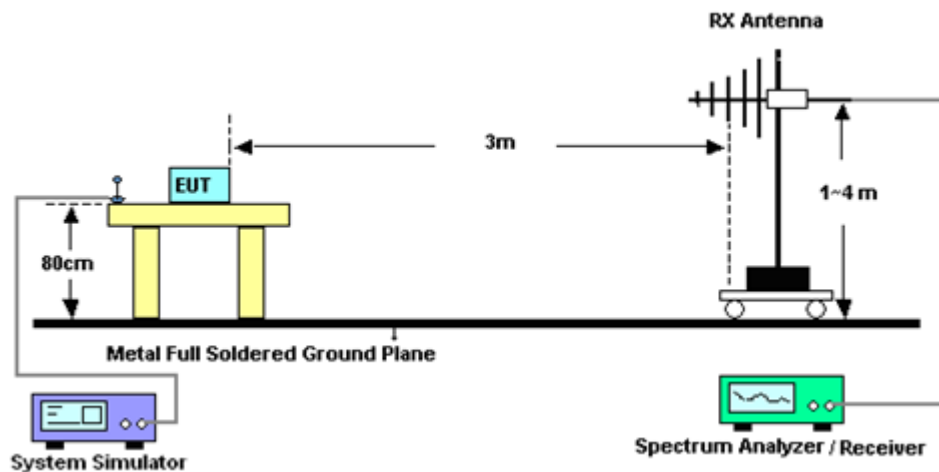
See list of measuring instruments of this test report.

4.2 Test Setup

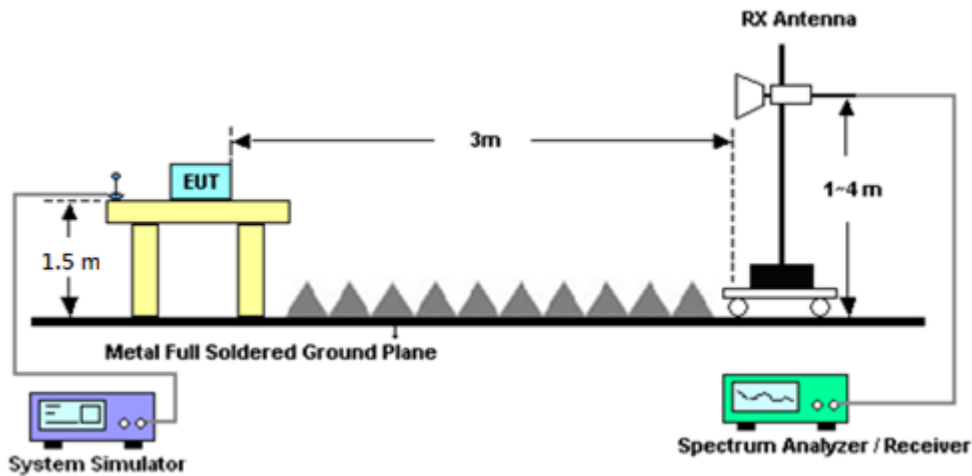
For radiated test below 30MHz



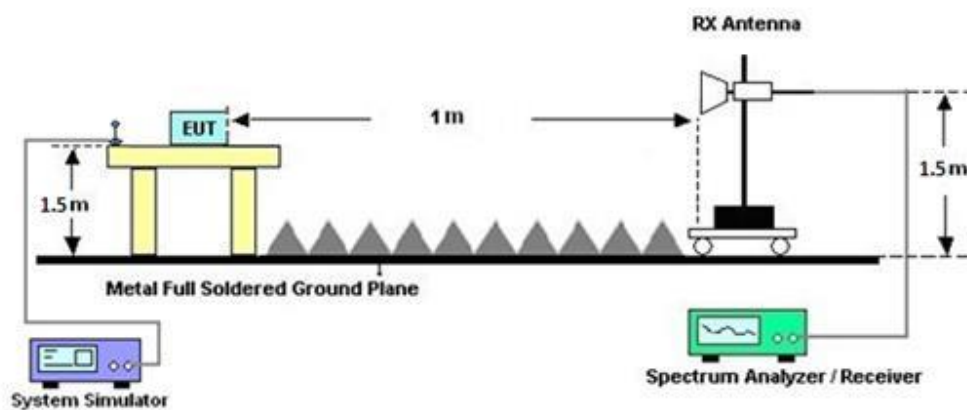
For radiated test from 30MHz to 1GHz



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 5.5.4 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 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. 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.



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	Jan. 03, 2025~ Feb. 05, 2025	Feb. 22, 2025	Radiation (03CH12-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	37059 & 01	30MHz~1GHz	Nov. 27, 2024	Jan. 03, 2025~ Feb. 05, 2025	Nov. 26, 2025	Radiation (03CH12-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02114	1GHz~18GHz	Jul. 11, 2024	Jan. 03, 2025~ Feb. 05, 2025	Jul. 10, 2025	Radiation (03CH12-HY)
Preamplifier	E-INSTRUMENT TECH LTD.	ERA-100M-18G-5 6-01-A70	EC1900269	1GHz-18GHz	Dec. 19, 2024	Jan. 03, 2025~ Feb. 05, 2025	Dec. 18, 2025	Radiation (03CH12-HY)
Spectrum Analyzer	Agilent	N9010A	MY53470118	10Hz~44GHz	Aug. 09, 2024	Jan. 03, 2025~ Feb. 05, 2025	Aug. 08, 2025	Radiation (03CH12-HY)
EMI Test Receiver	Agilent	N9038A(MXE)	MY53290053	20Hz~26.5GHz	Sep. 09, 2024	Jan. 03, 2025~ Feb. 05, 2025	Sep. 08, 2025	Radiation (03CH12-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	00993	18GHz-40GHz	Nov. 18, 2024	Jan. 03, 2025~ Feb. 05, 2025	Nov. 17, 2025	Radiation (03CH12-HY)
Preamplifier	EMEC	EM18G40G	060715	18GHz~40GHz	Dec. 02, 2024	Jan. 03, 2025~ Feb. 05, 2025	Dec. 01, 2025	Radiation (03CH12-HY)
Notch Filter	Wainwright	WHKX12-2700-30 00-18000-60ST	SN2	3GHz High Pass Filter	Mar. 13, 2024	Jan. 03, 2025~ Feb. 05, 2025	Mar. 12, 2025	Radiation (03CH12-HY)
Notch Filter	Wainwright	WLKS1200-12SS	SN2	1.2GHz Low Pass Filter	Mar. 13, 2024	Jan. 03, 2025~ Feb. 05, 2025	Mar. 12, 2025	Radiation (03CH12-HY)
Notch Filter	Wainwright	WHKX12-900-100 0-15000-60SS	SN11	1GHz High Pass Filter	Mar. 13, 2024	Jan. 03, 2025~ Feb. 05, 2025	Mar. 12, 2025	Radiation (03CH12-HY)
Notch Filter	Wainwright	WHKX8-5872.5-6 750-18000-40ST	SN2	6.75GHz High Pass Filter	Mar. 13, 2024	Jan. 03, 2025~ Feb. 05, 2025	Mar. 12, 2025	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803951/2	9kHz~30MHz	Mar. 06, 2024	Jan. 03, 2025~ Feb. 05, 2025	Mar. 05, 2025	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	505134/2	30MHz~40GHz	Dec. 19, 2024	Jan. 03, 2025~ Feb. 05, 2025	Dec. 18, 2025	Radiation (03CH12-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	803955/2	30MHz~40GHz	Nov. 01, 2024	Jan. 03, 2025~ Feb. 05, 2025	Oct. 31, 2025	Radiation (03CH12-HY)
RF Cable	EMCI	EMC101Y-KM-K M-100	240907	30MHz~40GHz	Nov. 14, 2024	Jan. 03, 2025~ Feb. 05, 2025	Dec. 13, 2025	Radiation (03CH12-HY)
Hygrometer	TECPEL	DTM-303B	TP210090	N/A	Aug. 29, 2024	Jan. 03, 2025~ Feb. 05, 2025	Aug. 28, 2025	Radiation (03CH12-HY)
Controller	EMEC	EM1000	N/A	Control Turn table & Ant Mast	N/A	Jan. 03, 2025~ Feb. 05, 2025	N/A	Radiation (03CH12-HY)
Antenna Mast	EMEC	AM-BS-4500-B	N/A	1m~4m	N/A	Jan. 03, 2025~ Feb. 05, 2025	N/A	Radiation (03CH12-HY)
Turn Table	EMEC	TT2000	N/A	0~360 Degree	N/A	Jan. 03, 2025~ Feb. 05, 2025	N/A	Radiation (03CH12-HY)
Software	Audix	E3 6.2009-8-24	RK-000989	N/A	N/A	Jan. 03, 2025~ Feb. 05, 2025	N/A	Radiation (03CH12-HY)
Radio Communication Analyzer	Anritsu	MT8821C	6262025353	LTE FDD/TDD LTE-2CC DLCA/ULCA	Oct. 01, 2024	Jan. 15, 2025~ Feb. 05, 2025	Sep. 30, 2025	Conducted (TH03-HY)
Thermal Chamber	ESPEC	SH-641	92013720	-40℃ ~90℃	Sep. 06, 2024	Jan. 15, 2025~ Feb. 05, 2025	Sep. 05, 2025	Conducted (TH03-HY)
Coupler+10dB+ Rf cable	Warison + WoKen + E-Instrument	20dB 25W SMA Directional Coupler+ 10dB 18GHz 5W+SFL 405 1.5M	#A+#1+#1+#7	1-18GHz	Jan. 03, 2025	Jan. 15, 2025~ Feb. 05, 2025	Jan. 02, 2026	Conducted (TH03-HY)
Software	Sporton	LTE Conducted Test Tools	N/A	Conducted Test Item	N/A	Jan. 15, 2025~ Feb. 05, 2025	N/A	Conducted (TH03-HY)
Hygrometer	TECPEL	DTM-303B	TP210073	-10 ~ 50℃ / 20 ~ 95%RH	Jun. 05, 2024	Jan. 15, 2025~ Feb. 05, 2025	Jun. 04, 2025	Conducted (TH03-HY)

6 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	6.3 dB
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Uncertainty of Radiated Emission Measurement (1 GHz ~ 6 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	4.7 dB
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Uncertainty of Radiated Emission Measurement (6 GHz ~ 18 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	5.0 dB
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Uncertainty of Radiated Emission Measurement (18 GHz ~ 40 GHz)

Measuring Uncertainty for a Level of Confidence of 95% ($U = 2U_c(y)$)	5.1 dB
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Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power & ERP/EIRP)

<Main Antenna>

Part 96 LTE Band 48 Maximum Average Power [dBm] (GT - LC = -1.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	20.97	21.09	21.14	19.74	0.0942
20	1	0	16-QAM	20.01	20.13	20.17	18.77	0.0753
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 48 Maximum Average Power [dBm] (GT - LC = -1.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	20.95	21.07	21.11	19.71	0.0935
15	1	0	16-QAM	19.99	20.11	20.16	18.76	0.0752
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 48 Maximum Average Power [dBm] (GT - LC = -1.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	20.95	21.08	21.12	19.72	0.0938
10	1	0	16-QAM	19.99	20.11	20.15	18.75	0.0750
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 48 Maximum Average Power [dBm] (GT - LC = -1.4 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	20.96	21.08	21.12	19.72	0.0938
5	1	0	16-QAM	20.00	20.11	20.16	18.76	0.0752
Limit	EIRP < 23dBm/10MHz			Result			Pass	

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



Part 96 LTE Band 42 Maximum Average Power [dBm] (GT - LC = -0.41 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	21.71	21.81	21.78	21.40	0.1380
20	1	0	16-QAM	20.92	20.92	20.94	20.53	0.1130
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 42 Maximum Average Power [dBm] (GT - LC = -0.41 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	21.61	21.71	21.65	21.30	0.1349
15	1	0	16-QAM	20.72	20.81	20.82	20.41	0.1099
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 42 Maximum Average Power [dBm] (GT - LC = -0.41 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	21.51	21.71	21.58	21.30	0.1349
10	1	0	16-QAM	20.74	20.80	20.84	20.43	0.1104
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 42 Maximum Average Power [dBm] (GT - LC = -0.41 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	21.58	21.63	21.66	21.25	0.1334
5	1	0	16-QAM	20.78	20.81	20.77	20.40	0.1096
Limit	EIRP < 23dBm/10MHz			Result			Pass	

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

**<MIMO2 Antenna>**

Part 96 LTE Band 48 Maximum Average Power [dBm] (GT - LC = 0.95 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	20.97	21.09	21.13	22.08	0.1614
20	1	0	16-QAM	20.01	20.13	20.17	21.12	0.1294
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 48 Maximum Average Power [dBm] (GT - LC = 0.95 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	20.94	21.06	21.11	22.06	0.1607
15	1	0	16-QAM	19.98	20.09	20.14	21.09	0.1285
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 48 Maximum Average Power [dBm] (GT - LC = 0.95 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	20.94	21.05	21.11	22.06	0.1607
10	1	0	16-QAM	19.97	20.09	20.14	21.09	0.1285
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 48 Maximum Average Power [dBm] (GT - LC = 0.95 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	20.93	21.06	21.10	22.05	0.1603
5	1	0	16-QAM	19.99	20.10	20.13	21.08	0.1282
Limit	EIRP < 23dBm/10MHz			Result			Pass	

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



Part 96 LTE Band 42 Maximum Average Power [dBm] (GT - LC = 0.98 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	21.71	21.81	21.78	22.79	0.1901
20	1	0	16-QAM	20.92	21.00	20.94	21.98	0.1578
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 42 Maximum Average Power [dBm] (GT - LC = 0.98 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	21.67	21.78	21.72	22.76	0.1888
15	1	0	16-QAM	20.88	20.99	20.92	21.97	0.1574
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 42 Maximum Average Power [dBm] (GT - LC = 0.98 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	21.69	21.79	21.73	22.77	0.1892
10	1	0	16-QAM	20.88	20.97	20.91	21.95	0.1567
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 42 Maximum Average Power [dBm] (GT - LC = 0.98 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	21.68	21.79	21.74	22.77	0.1892
5	1	0	16-QAM	20.89	20.98	20.93	21.96	0.1570
Limit	EIRP < 23dBm/10MHz			Result			Pass	

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



Part 96 LTE Band 43 Maximum Average Power [dBm] (GT - LC = 0.98 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	21.68	21.70	21.79	22.77	0.1892
20	1	0	16-QAM	20.78	20.83	20.87	21.85	0.1531
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 43 Maximum Average Power [dBm] (GT - LC = 0.98 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	21.67	21.74	21.77	22.75	0.1884
15	1	0	16-QAM	20.70	20.75	20.80	21.78	0.1507
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 43 Maximum Average Power [dBm] (GT - LC = 0.98 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	21.69	21.76	21.76	22.74	0.1879
10	1	0	16-QAM	20.70	20.75	20.81	21.79	0.1510
Limit	EIRP < 23dBm/10MHz			Result			Pass	

Part 96 LTE Band 43 Maximum Average Power [dBm] (GT - LC = 0.98 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	21.68	21.74	21.74	22.72	0.1871
5	1	0	16-QAM	20.70	20.75	20.79	21.77	0.1503
Limit	EIRP < 23dBm/10MHz			Result			Pass	

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



LTE Band 48C_CA Maximum Average Power [dBm] (GT - LC = 0.95 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	20.24	20.13	20.01	21.19	0.1315
20+20	1	99	1	0	16-QAM	19.69	19.55	19.45	20.64	0.1159
20+15	1	74	1	0	QPSK	20.20	20.17	19.99	21.15	0.1303
20+15	1	74	1	0	16-QAM	19.66	19.60	19.44	20.61	0.1151
15+20	1	74	1	0	QPSK	20.29	20.18	20.08	21.24	0.1330
15+20	1	74	1	0	16-QAM	19.75	19.64	19.55	20.70	0.1175
Limit	EIRP < 23dBm/10MHz					Result			Pass	

LTE Band 48C_CA Maximum Average Power [dBm] (GT - LC = 0.95 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	20.12	20.03	19.86	21.07	0.1279
20+10	1	99	1	0	16-QAM	19.54	19.48	19.31	20.49	0.1119
10+20	1	49	1	0	QPSK	20.15	19.98	19.86	21.10	0.1288
10+20	1	49	1	0	16-QAM	19.59	19.43	19.30	20.54	0.1132
20+5	1	99	1	0	QPSK	20.16	20.05	19.92	21.11	0.1291
20+5	1	99	1	0	16-QAM	19.62	19.52	19.34	20.57	0.1140
Limit	EIRP < 23dBm/10MHz					Result			Pass	

LTE Band 48C_CA Maximum Average Power [dBm] (GT - LC = 0.95 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	20.10	20.06	19.93	21.05	0.1274
5+20	1	24	1	0	16-QAM	19.56	19.46	19.33	20.51	0.1125
Limit	EIRP < 23dBm/10MHz					Result			Pass	

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



LTE Band 42C_CA Maximum Average Power [dBm] (GT - LC = 0.98 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	21.91	21.93	21.92	22.91	0.1954
20+20	1	99	1	0	16-QAM	21.49	21.48	21.48	22.47	0.1766
20+15	1	74	1	0	QPSK	21.95	21.91	21.92	22.93	0.1963
20+15	1	74	1	0	16-QAM	21.48	21.45	21.46	22.46	0.1762
15+20	1	74	1	0	QPSK	22.07	22.09	22.10	23.08	0.2032
15+20	1	74	1	0	16-QAM	21.59	21.61	21.62	22.60	0.1820
Limit	EIRP < 23dBm/10MHz					Result			Fail	

LTE Band 42C_CA Maximum Average Power [dBm] (GT - LC = 0.98 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	21.82	21.81	21.77	22.80	0.1905
20+10	1	99	1	0	16-QAM	21.36	21.34	21.32	22.34	0.1714
10+20	1	49	1	0	QPSK	21.77	21.81	21.80	22.79	0.1901
10+20	1	49	1	0	16-QAM	21.30	21.33	21.33	22.31	0.1702
20+5	1	99	1	0	QPSK	21.95	21.92	21.89	22.93	0.1963
20+5	1	99	1	0	16-QAM	21.51	21.47	21.44	22.49	0.1774
Limit	EIRP < 23dBm/10MHz					Result			Pass	

LTE Band 42C_CA Maximum Average Power [dBm] (GT - LC = 0.98 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	21.98	22.03	22.01	23.01	0.2000
5+20	1	24	1	0	16-QAM	21.50	21.55	21.52	22.53	0.1791
Limit	EIRP < 23dBm/10MHz					Result			Fail	

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
56	Part 96	LTE B48	L	7102	-43.04	RMS	36.61	-53.58	0.90	-95.23	68.26	-40.00	-3.04	V	MIMO2
57	Part 96	LTE CA 48C	M	10872	-44.07	RMS	39.16	-51.76	0.27	-95.23	63.49	-40.00	-4.07	H	MIMO2

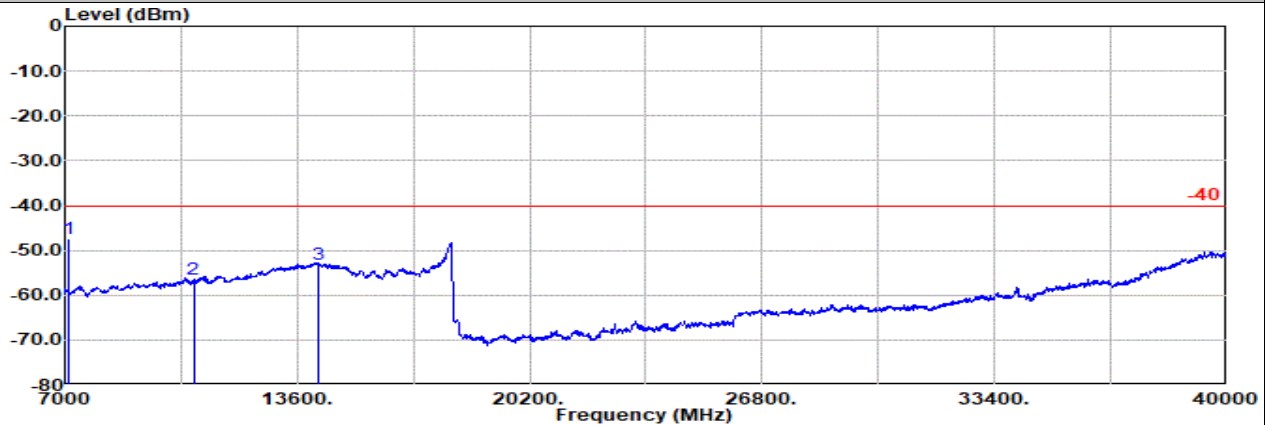


Ant MIMO2

Part 96 Mode 56

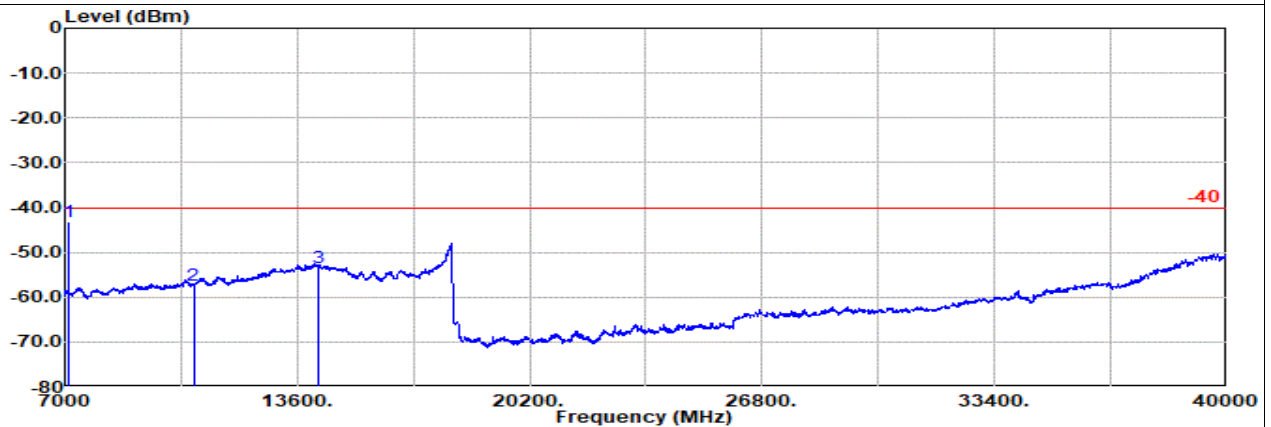
LTE B48 20M Ch55340 1RB0 QPSK

L



Site : 03CH12-HY
Condition: -40 3m 9120D-02114-240711 Horizontal
Mode : LTE B48 20M Ch55340 1RB0 QPSK

	Freq Level		Detector	Ant Amp\Cb		Filter	EIRPCF		Reading	Limit		Margin	Pol
	MHz	dBm		Factor	dB		dB	dB		dBuV	dBm	dB	
1	7102.00	-47.29	RMS	36.61	-53.58	0.90	-95.23	64.01	-40.00	-7.29	Horizontal		
2	10653.00	-56.34	RMS	39.20	-51.99	0.26	-95.23	51.42	-40.00	-16.34	Horizontal		
3	14204.00	-53.27	RMS	40.99	-48.02	0.45	-95.23	48.54	-40.00	-13.27	Horizontal		



Site : 03CH12-HY
Condition: -40 3m 9120D-02114-240711 Vertical
Mode : LTE B48 20M Ch55340 1RB0 QPSK

	Freq Level		Detector	Ant Amp\Cb		Filter	EIRPCF		Reading	Limit		Margin	Pol
	MHz	dBm		Factor	dB		dB	dB		dBuV	dBm	dB	
1	7102.00	-43.04	RMS	36.61	-53.58	0.90	-95.23	68.26	-40.00	-3.04	Vertical		
2	10653.00	-57.29	RMS	39.20	-51.99	0.26	-95.23	50.47	-40.00	-17.29	Vertical		
3	14204.00	-53.49	RMS	40.99	-48.02	0.45	-95.23	48.32	-40.00	-13.49	Vertical		

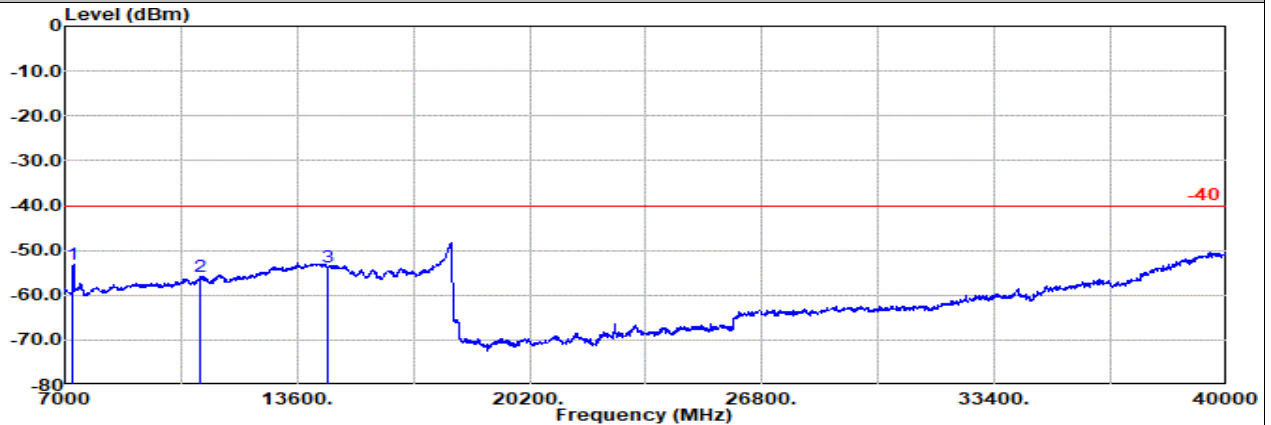


Ant MIMO2

Part 96 Mode 56

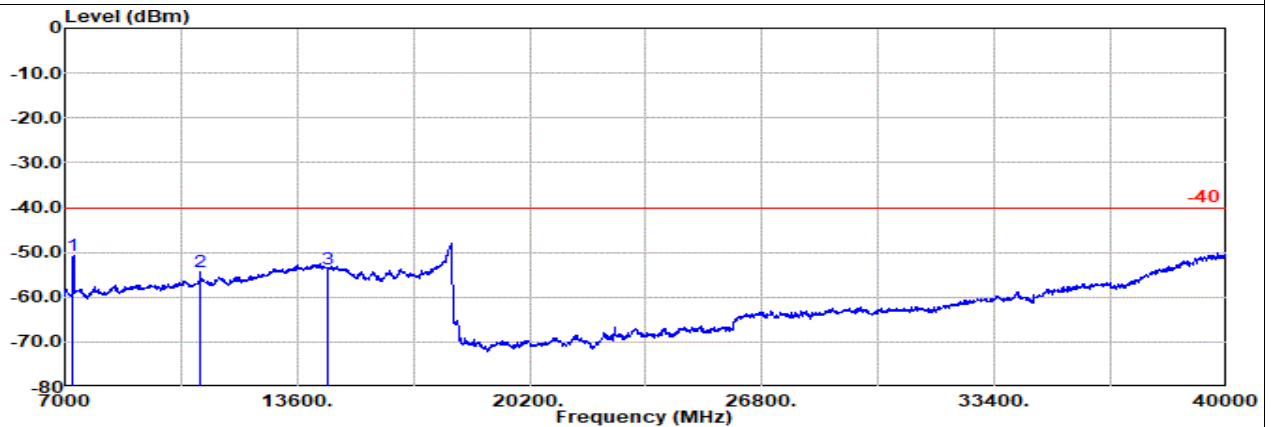
LTE B48 20M Ch55990 1RB0 QPSK

M



Site : 03CH12-HY
Condition: -40 3m 9120D-02114-240711 Horizontal
Mode : LTE B48 20M Ch55990 1RB0 QPSK

	Freq Level		Detector	Ant Amp\Cb Filter		Factor	Filter		EIRPCF	Readin g	Limit		Margin	Pol
	MHz	dBm		dB/m	dB		dB	dB			dBuV	dBm	dB	
1	7232.00	-53.12	RMS	37.13	-53.49	0.88	-95.23	57.59	-40.00	-13.12	Horizontal			
2	10848.00	-55.94	RMS	39.20	-51.78	0.27	-95.23	51.60	-40.00	-15.94	Horizontal			
3	14464.00	-53.66	RMS	40.63	-47.57	0.44	-95.23	48.07	-40.00	-13.66	Horizontal			



Site : 03CH12-HY
Condition: -40 3m 9120D-02114-240711 Vertical
Mode : LTE B48 20M Ch55990 1RB0 QPSK

	Freq Level		Detector	Ant Amp\Cb Filter		Factor	Filter		EIRPCF	Readin g	Limit		Margin	Pol
	MHz	dBm		dB/m	dB		dB	dB			dBuV	dBm	dB	
1	7232.00	-50.58	RMS	37.13	-53.49	0.88	-95.23	60.13	-40.00	-10.58	Vertical			
2	10848.00	-54.44	RMS	39.20	-51.78	0.27	-95.23	53.10	-40.00	-14.44	Vertical			
3	14464.00	-53.60	RMS	40.63	-47.57	0.44	-95.23	48.13	-40.00	-13.60	Vertical			

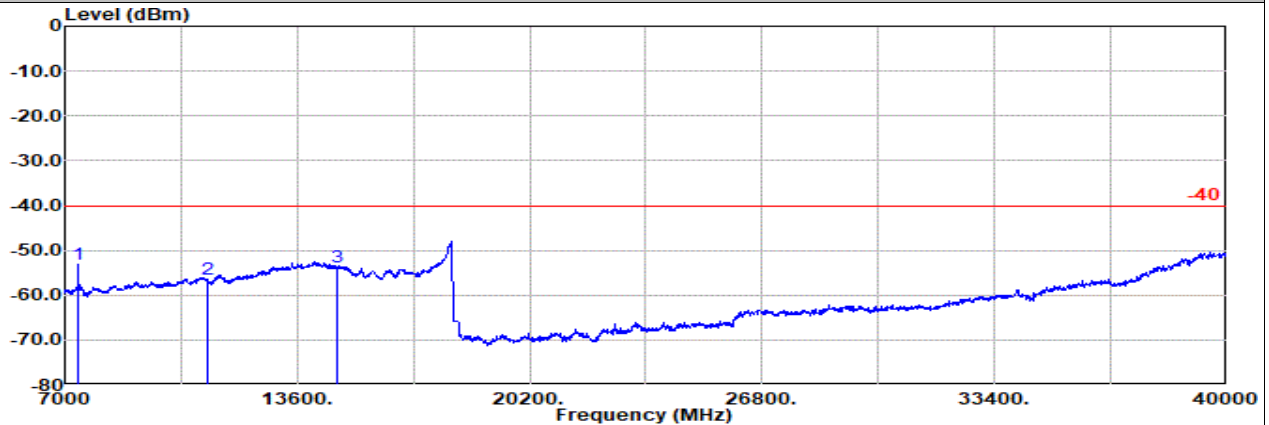


Ant MIMO2

Part 96 Mode 56

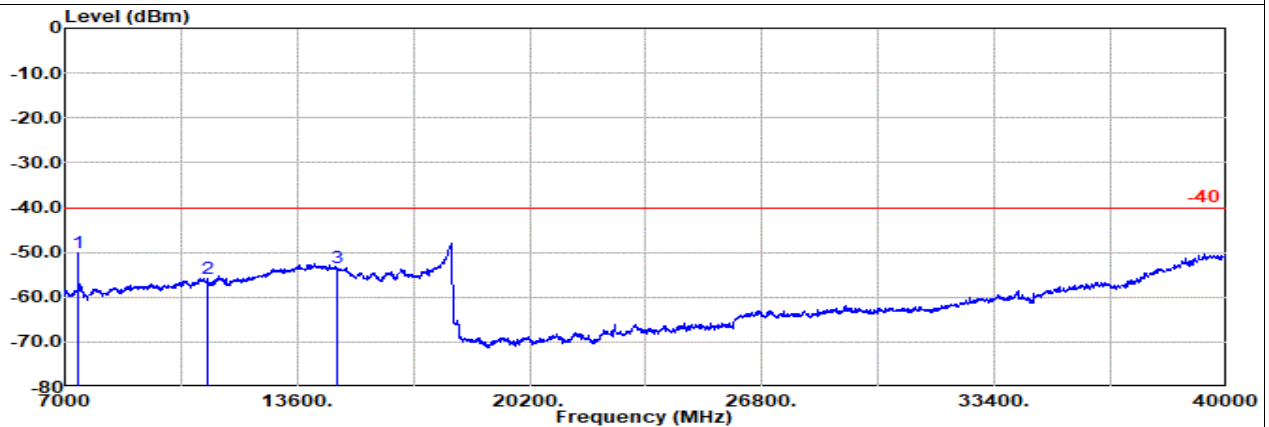
LTE B48 20M Ch56640 1RB0 QPSK

H



Site : 03CH12-HY
Condition: -40 3m 9120D-02114-240711 Horizontal
Mode : LTE B48 20M Ch56640 1RB0 QPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter 1		EIRPCF	Reading	Limit		Margin	Pol
	MHz	dBm			dB/m	dB			dBuV	dBm	dB	
1	7362.00	-53.23	RMS	36.83	-53.44	0.83	-95.23	57.78	-40.00	-13.23	Horizontal	
2	11043.00	-56.45	RMS	38.90	-51.54	0.28	-95.23	51.14	-40.00	-16.45	Horizontal	
3	14724.00	-53.70	RMS	40.65	-47.96	0.42	-95.23	48.42	-40.00	-13.70	Horizontal	



Site : 03CH12-HY
Condition: -40 3m 9120D-02114-240711 Vertical
Mode : LTE B48 20M Ch56640 1RB0 QPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter 1		EIRPCF	Reading	Limit		Margin	Pol
	MHz	dBm			dB/m	dB			dBuV	dBm	dB	
1	7362.00	-50.17	RMS	36.83	-53.44	0.83	-95.23	60.84	-40.00	-10.17	Vertical	
2	11043.00	-55.74	RMS	38.90	-51.54	0.28	-95.23	51.85	-40.00	-15.74	Vertical	
3	14724.00	-53.58	RMS	40.65	-47.96	0.42	-95.23	48.54	-40.00	-13.58	Vertical	

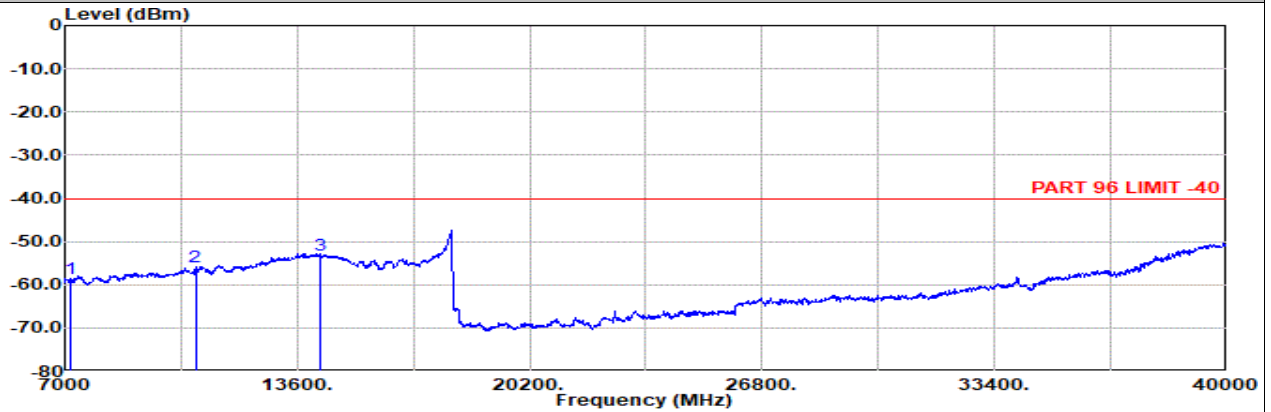


Ant MIMO2

Part 96 Mode 57

LTE CA 48C 20M + 20M Ch55340 1RB99 QPSK + Ch55538 1RB0 QPSK

L



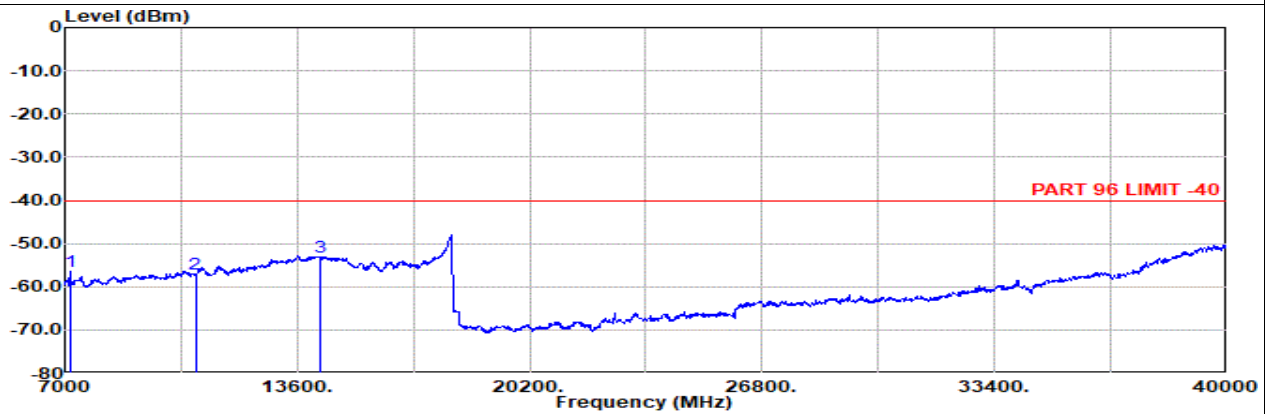
Site : 03CH12-HY

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

: LTE Band 48 20M Ch55340 1RB99 QPSK

: LTE Band 48 20M Ch55538 1RB0 QPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter		EIRPCF	Readin g	Limit		Margin	Pol
	MHz	dBm			dB/m	dB	dB		dBuV	dBm	dB	
1	7137.00	-58.48	RMS		36.75	-53.55	0.90	-95.23	52.65	-40.00	-18.48	Horizontal
2	10706.00	-55.99	RMS		39.19	-51.93	0.26	-95.23	51.72	-40.00	-15.99	Horizontal
3	14275.00	-53.12	RMS		40.90	-47.89	0.45	-95.23	48.65	-40.00	-13.12	Horizontal



Site : 03CH12-HY

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

: LTE Band 48 20M Ch55340 1RB99 QPSK

: LTE Band 48 20M Ch55538 1RB0 QPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter		EIRPCF	Readin g	Limit		Margin	Pol
	MHz	dBm			dB/m	dB	dB		dBuV	dBm	dB	
1	7137.00	-56.44	RMS		36.75	-53.55	0.90	-95.23	54.69	-40.00	-16.44	Vertical
2	10706.00	-56.96	RMS		39.19	-51.93	0.26	-95.23	50.75	-40.00	-16.96	Vertical
3	14275.00	-53.15	RMS		40.90	-47.89	0.45	-95.23	48.62	-40.00	-13.15	Vertical

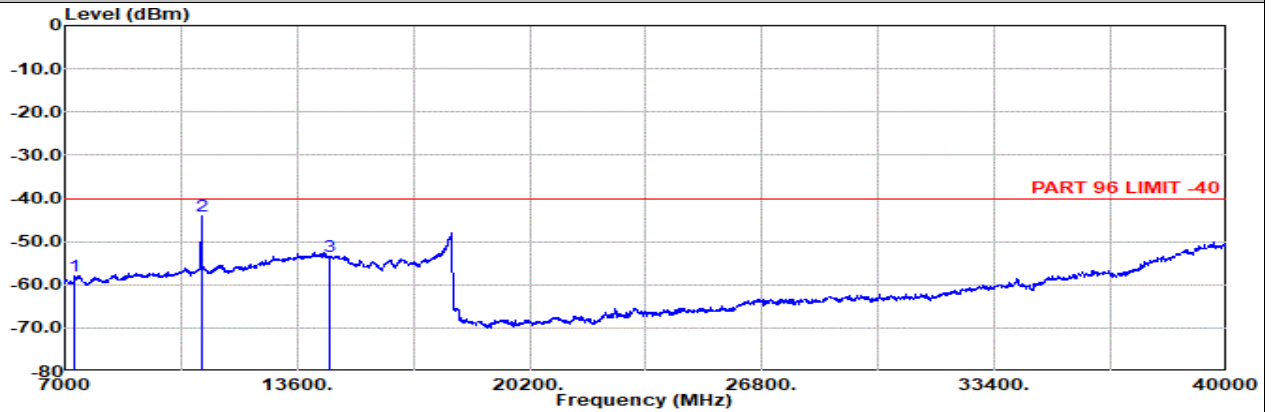


Ant MIMO2

Part 96 Mode 57

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

M



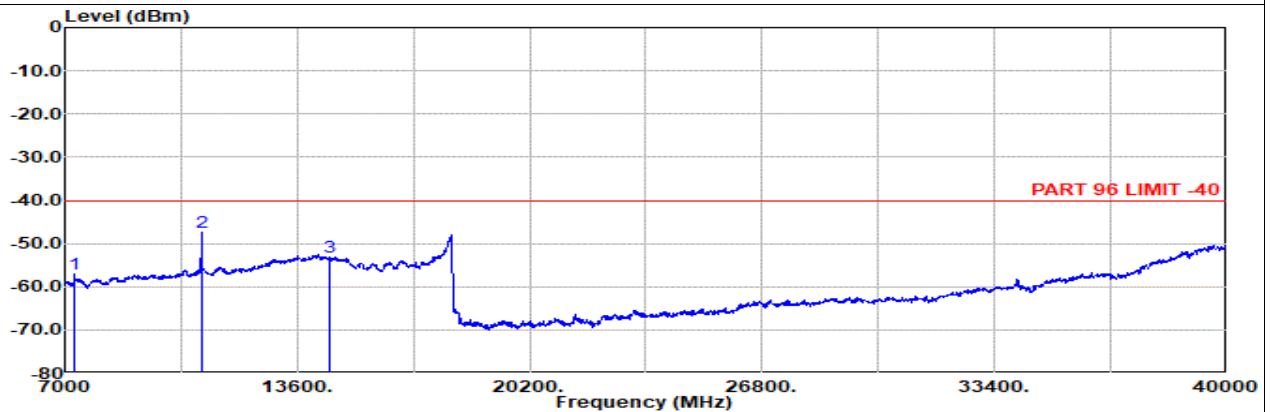
Site : 03CH12-HY

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

: LTE Band 48 20M Ch55891 1RB99 QPSK

: LTE Band 48 20M Ch56089 1RB0 QPSK

	Freq Level		Detector	Ant Amp\Cb Filter		Factor	Filter		EIRPCF	Readin Limit		Margin	Pol
	MHz	dBm		dB/m	dB		dB	dB		dBuV	dBm	dB	
1	7248.00	-58.11	RMS	37.19	-53.49	0.87	-95.23	52.55	-40.00	-18.11	Horizontal		
2	10872.00	-44.07	RMS	39.16	-51.76	0.27	-95.23	63.49	-40.00	-4.07	Horizontal		
3	14496.00	-53.50	RMS	40.69	-47.51	0.44	-95.23	48.11	-40.00	-13.50	Horizontal		



Site : 03CH12-HY

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

: LTE Band 48 20M Ch55891 1RB99 QPSK

: LTE Band 48 20M Ch56089 1RB0 QPSK

	Freq Level		Detector	Ant Amp\Cb Filter		Factor	Filter		EIRPCF	Readin Limit		Margin	Pol
	MHz	dBm		dB/m	dB		dB	dB		dBuV	dBm	dB	
1	7248.00	-56.93	RMS	37.19	-53.49	0.87	-95.23	53.73	-40.00	-16.93	Vertical		
2	10872.00	-47.37	RMS	39.16	-51.76	0.27	-95.23	60.19	-40.00	-7.37	Vertical		
3	14496.00	-53.16	RMS	40.69	-47.51	0.44	-95.23	48.45	-40.00	-13.16	Vertical		

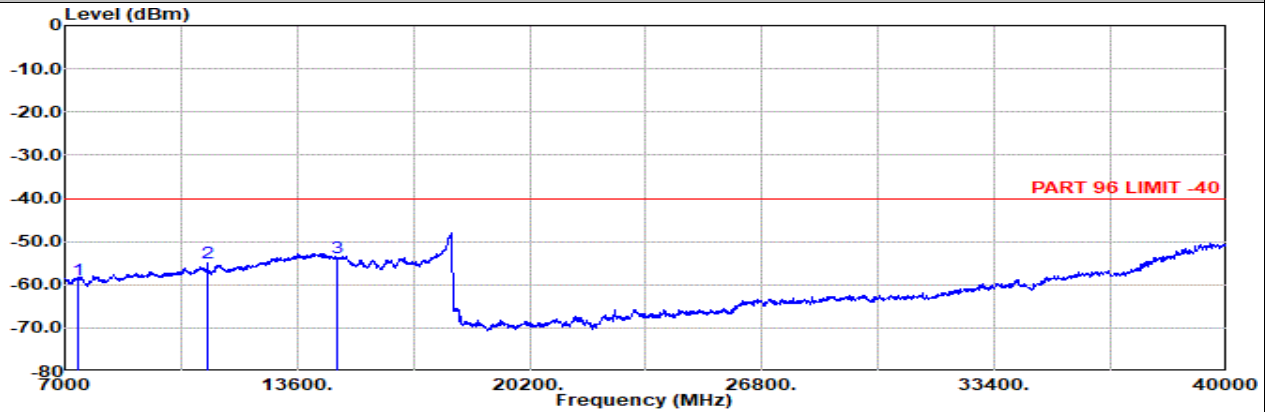


Ant MIMO2

Part 96 Mode 57

LTE CA 48C 20M + 20M Ch56442 1RB99 QPSK + Ch56640 1RB0 QPSK

H



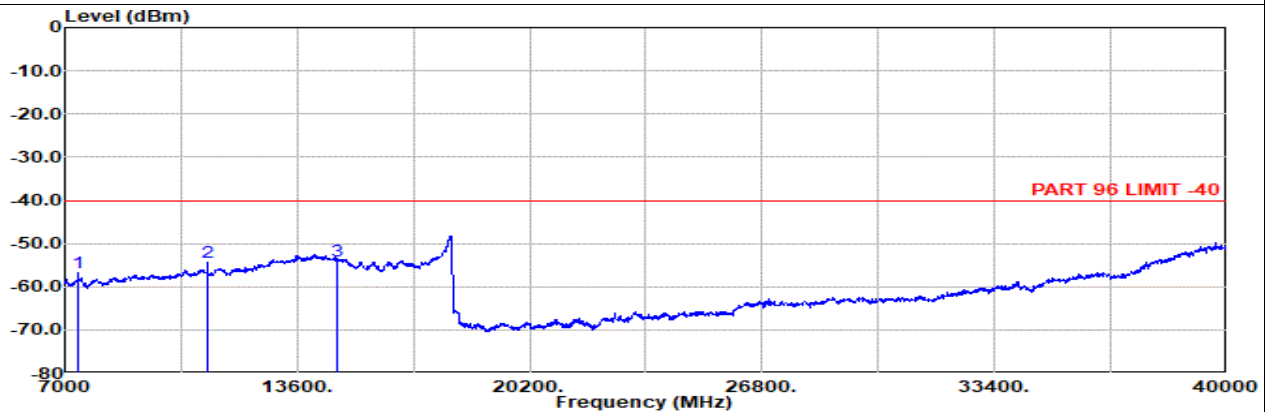
Site : 03CH12-HY

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

: LTE Band 48 20M Ch56442 1RB99 QPSK

: LTE Band 48 20M Ch56640 1RB0 QPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter		EIRPCF	Readin g	Limit		Margin	Pol
	MHz	dBm			dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7358.00	-58.79	RMS	36.85	-53.44	0.83	-95.23	52.20	-40.00	-18.79	Horizontal	
2	11037.00	-54.90	RMS	38.90	-51.55	0.28	-95.23	52.70	-40.00	-14.90	Horizontal	
3	14716.00	-53.80	RMS	40.67	-47.94	0.42	-95.23	48.28	-40.00	-13.80	Horizontal	



Site : 03CH12-HY

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

: LTE Band 48 20M Ch56442 1RB99 QPSK

: LTE Band 48 20M Ch56640 1RB0 QPSK

	Freq Level		Detector	Ant Factor	Amp\Cb Filter		EIRPCF	Readin g	Limit		Margin	Pol
	MHz	dBm			dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7358.00	-56.78	RMS	36.85	-53.44	0.83	-95.23	54.21	-40.00	-16.78	Vertical	
2	11037.00	-54.40	RMS	38.90	-51.55	0.28	-95.23	53.20	-40.00	-14.40	Vertical	
3	14716.00	-53.92	RMS	40.67	-47.94	0.42	-95.23	48.16	-40.00	-13.92	Vertical	

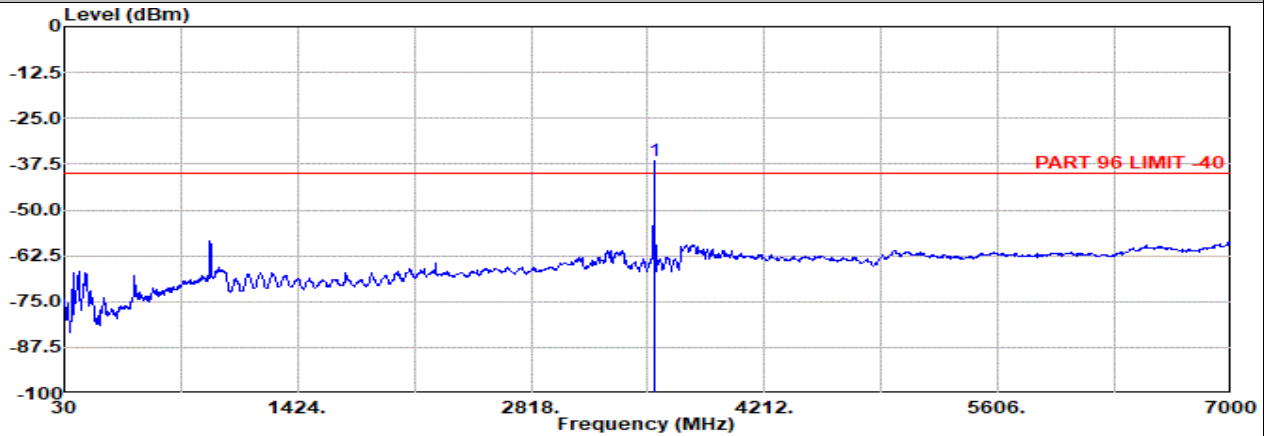


Ant MIMO2

Part 96 Mode 56

LTE B48 20M Ch55340 1RB0 QPSK

L



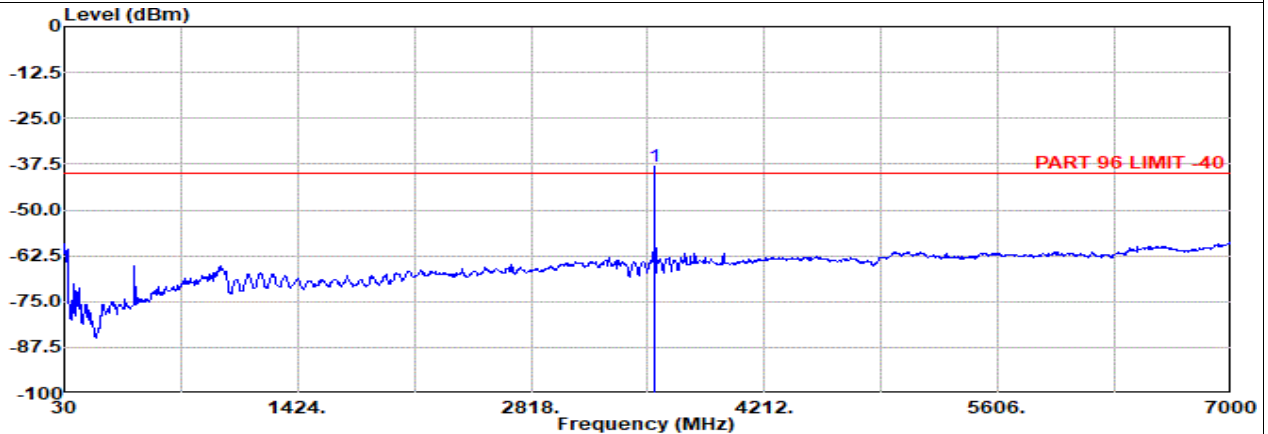
Site : 03CH12-HY

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

: LTE Band 48 20M Ch55340 1RB0 QPSK

: #1 is fundamental signal which can be ignored.

	Freq	Level	Detector	Ant Factor	Amp\Cb	Filter	EIRPCF	Readin	Limit	Margin	Pol
	MHz	dBm			1			g	dBm		
1	3551.09	-36.59	RMS	29.60	-57.90	0.54	-95.23	86.40	-40.00	3.41	Horizontal



Site : 03CH12-HY

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

: LTE Band 48 20M Ch55340 1RB0 QPSK

: #1 is fundamental signal which can be ignored.

	Freq	Level	Detector	Ant	Amp	Cb	Filter	EIRPCF	Readin	Limit	Margin	Pol
				Factor		1				g		
	MHz	dBm		dB/m	dB		dB		dBuV	dBm		
1	3551.09	-38.17	RMS	29.60	-57.90	0.54	-95.23		84.82	-40.00	1.83	Vertical

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