FCC RADIO TEST REPORT

FCC ID	:	**B94HNI61KLR**
Equipment	:	**Notebook Computer**
Brand Name	:	**HP**
Model Name	:	**HSN-I61C**
Applicant	:	**HP Inc.** **1501 Page Mill Road, Palo Alto CA 94304 USA**
Standard	:	**FCC 47 CFR Part 2, 96**

The product was received on Sep. 09, 2024 and testing was performed from Sep. 20, 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.

Louis Wu

Approved by: Louis Wu

Sporton International Inc. EMC & Wireless Communications Laboratory
No. 52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.)

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History of this test report

Report No.	Version	Description	Issue Date
FG490504D	01	Initial issue of report	Nov. 20, 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
-	§96.41	Effective Isotropic Radiated Power	Pass	See Note
-	§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	16.28 dB under the limit at 14275.00 MHz

Note:

1. For host device, Radiated Spurious Emission and Effective Radiated Power are verified and complies with the limit in this test report.
2. For host device, the Conducted Output Power is no difference after compared to module (Model: RW350R-GL)

Conformity Assessment Condition:

1. The test results (PASS/FAIL) with all measurement uncertainty excluded are presented against the regulation limits or in accordance with the requirements stipulated by the applicant/manufacturer who shall bear all the risks of non-compliance that may potentially occur if measurement uncertainty is taken into account.
2. The measurement uncertainty please refer to each test result in the section “Measurement Uncertainty”.

Disclaimer:

The product specifications of the EUT presented in the test report that may affect the test assessments are declared by the manufacturer who shall take full responsibility for the authenticity.

Reviewed by: Sheng Kuo

Report Producer: Lucy Wu

1 General Description

1.1 Product Feature of Equipment Under Test

Product Feature	
General Specs	WCDMA/LTE/5G NR, Bluetooth, Wi-Fi 2.4GHz 802.11b/g/n/ax/be, Wi-Fi 5GHz 802.11a/n/ac/ax/be, Wi-Fi 6GHz 802.11ax/be, NFC, and GNSS
Sample 1	Host with Vendor 2 Antenna
Sample 2	Host with Vendor 1 Antenna
Integrated WWAN Module	Brand Name: Rolling Wireless Model Name: RW350R-GL FCC ID: 2AX2URW350RGL
Integrated WLAN Module	Brand Name: Intel Model Name: BE201NGW FCC ID: PD9BE201NG
Integrated NFC Module	Brand Name: WNC Model Name: XRAV-1 FCC ID: NKR-XRAV1
Antenna Type	WWAN: PIFA Antenna WLAN: <Main>: PIFA Antenna <Aux.>: PIFA Antenna Bluetooth: PIFA Antenna GPS/Glonass/BDS/Galileo: PIFA Antenna NFC: Loop Antenna

Support band and evaluated information	
Supported band	B42, B43, B48
Evaluated and Tested band	B42, B43, B48

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

WWAN Antenna Information for Notebook Mode				
Antenna 8	**Brand Name**	Vendor 2	**Peak gain (dBi)**	LTE Band 42: -0.35 LTE Band 43: -0.72 LTE Band 48: -2.00
	Part number	6036B0361301 (81ELBF15.G04)	**Type**	PIFA
	Brand Name	Vendor 1	**Peak gain (dBi)**	LTE Band 42: 0.31 LTE Band 43: 0.71 LTE Band 48: 0.96
	Part number	6036B0361401 (00-350270155N)	**Type**	PIFA

WWAN Antenna Information for Tablet Mode				
Antenna 8	**Brand Name**	Vendor 2	**Peak gain (dBi)**	LTE Band 42: -2.52 LTE Band 43: 0.68 LTE Band 48: -2.55
	Part number	6036B0361301 (81ELBF15.G04)	**Type**	PIFA
	Brand Name	Vendor 1	**Peak gain (dBi)**	LTE Band 42: -1.09 LTE Band 43: -2.16 LTE Band 48: -2.23
	Part number	6036B0361401 (00-350270155N)	**Type**	PIFA

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

1.2 Modification of EUT

No modifications made to the EUT during the testing.

1.3 Testing Site

Test Site	Sporton International Inc. EMC & Wireless Communications Laboratory
Test Site Location	No.52, Huaya 1st Rd., Guishan Dist., Taoyuan City 333, Taiwan (R.O.C.) TEL: +886-3-327-3456 FAX: +886-3-328-4978
Test Site No.	**Sporton Site No.**
	TH03-HY
Test Engineer	Yuki Chen
Temperature (℃)	22.3~23.5
Relative Humidity (%)	52.3~55.5

Test Site	Sporton International Inc. Wensan Laboratory
Test Site Location	No.58, Aly. 75, Ln. 564, Wenhua 3rd, Rd., Guishan Dist., Taoyuan City 333010, Taiwan (R.O.C.) TEL: +886-3-327-0868 FAX: +886-3-327-0855
Test Site No.	**Sporton Site No.**
	03CH15-HY (TAF Code: 3786)
Test Engineer	Sam Pan, Quentin Liu and Bigshow Wang
Temperature (℃)	22~23.5
Relative Humidity (%)	50~59
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

1.4 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 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 Type (three orthogonal axis (X: flat, Y: portrait, Z: landscape)) and Notebook Type, and adjusting the measurement antenna orientation, following C63.26 exploratory test procedures and only the worst case emissions were reported in this report.

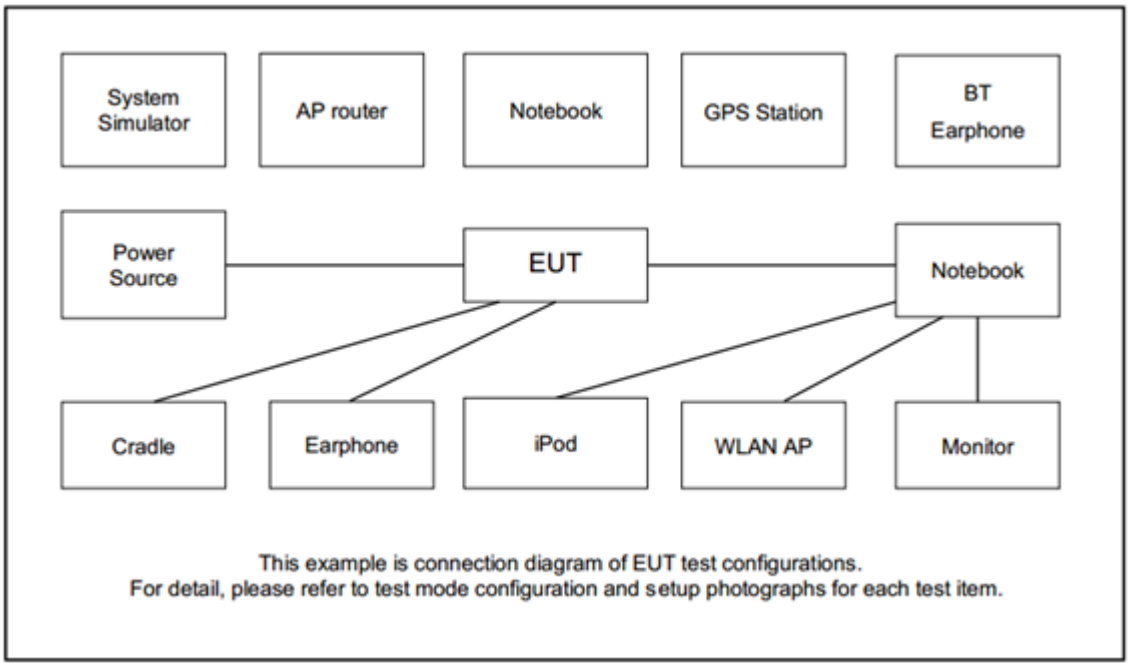
Modulation Type	Modulation
A	QPSK
B	16QAM
C	64QAM
D	256QAM

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 or less	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. All the radiated test cases were performed with Sample 2.

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	Shielded, 1.2 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

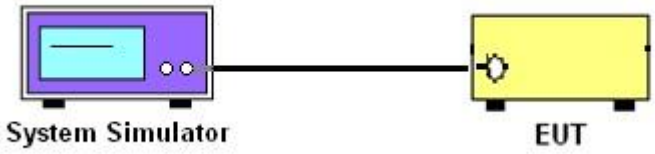
3 Conducted Test Items

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

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

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.

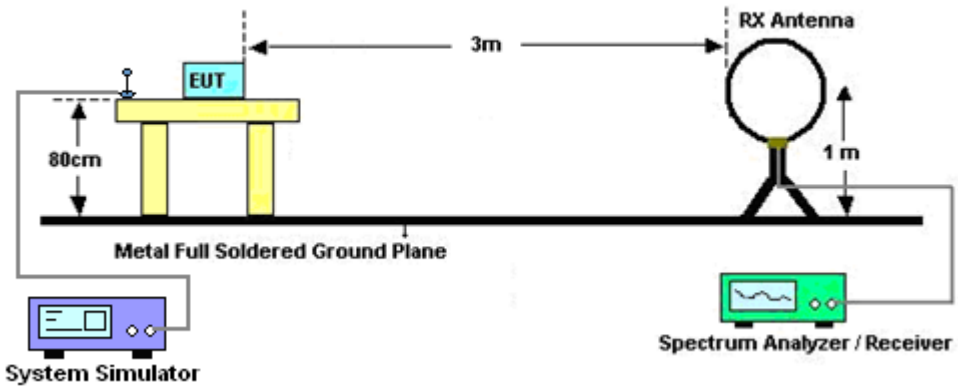
4 Radiated Test Items

4.1 Measuring Instruments

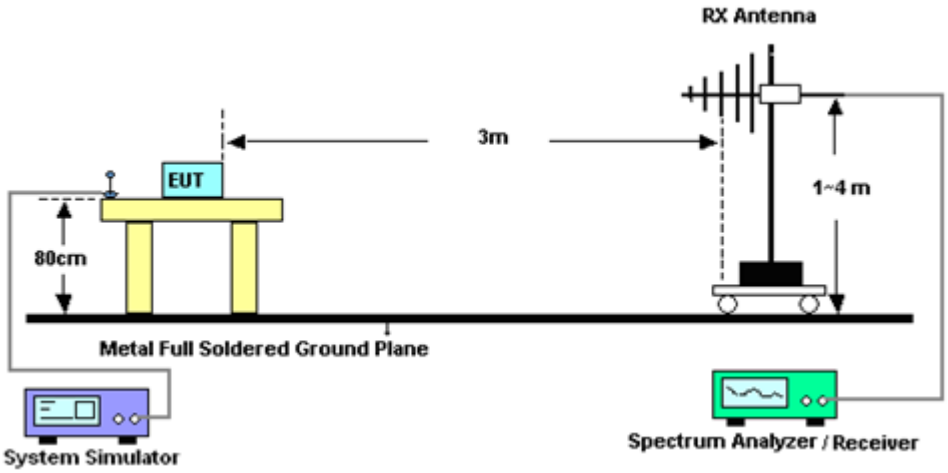
See list of measuring instruments of this test report.

4.2 Test Setup

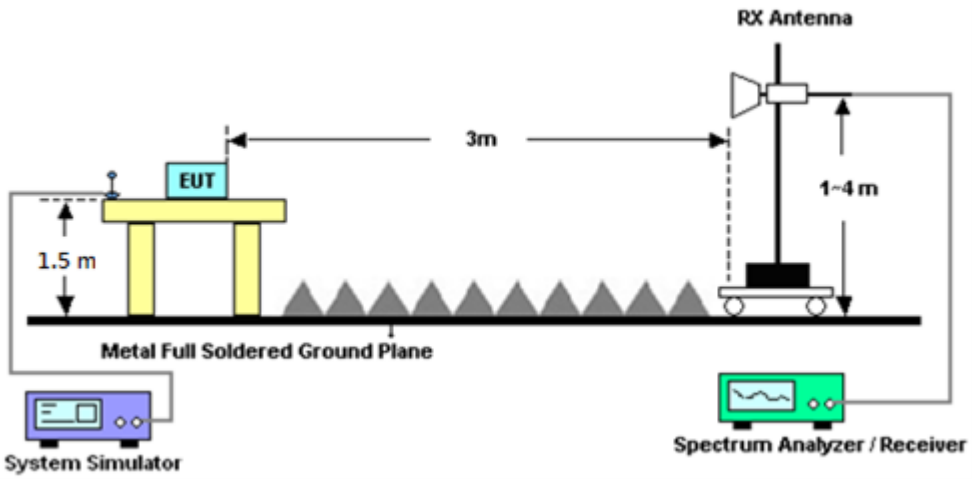
For radiated test below 30MHz



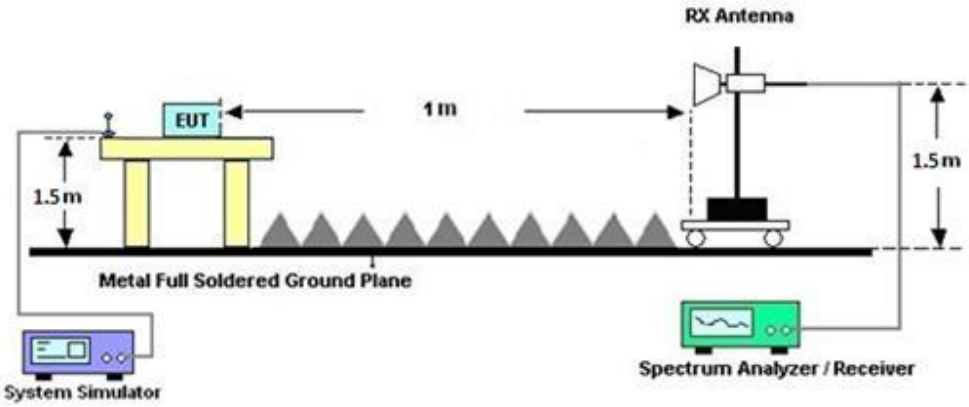
For radiated test from 30MHz to 1GHz



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. 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)
   EIRP(dBm) = Level (dBuV/m) + 20log(d) -104.77,
   where d is the distance at which filed 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	Feb. 23, 2024	Sep. 25, 2024~ Sep. 29, 2024	Feb. 22, 2025	Radiation (03CH15-HY)
Bilog Antenna	TESEQ	CBL 6111D & 00800N1D01N-06	41912 & 05	30MHz~1GHz	Feb. 04, 2024	Sep. 25, 2024~ Sep. 29, 2024	Feb. 03, 2025	Radiation (03CH15-HY)
Horn Antenna	SCHWARZBECK	BBHA 9120 D	9120D-02294	1GHz~18GHz	Jun. 20, 2024	Sep. 25, 2024~ Sep. 29, 2024	Jun. 19, 2025	Radiation (03CH15-HY)
SHF-EHF Horn Antenna	SCHWARZBECK	BBHA 9170	1223	18GHz~40GHz	Jun. 24, 2024	Sep. 25, 2024~ Sep. 29, 2024	Jun. 23, 2025	Radiation (03CH15-HY)
Amplifier	SONOMA	310N	363440	9kHz~1GHz	Dec. 25, 2023	Sep. 25, 2024~ Sep. 29, 2024	Dec. 24, 2024	Radiation (03CH15-HY)
Preamplifier	EMEC	EM01G18G	060837	1GHz~18GHz	Feb. 15, 2024	Sep. 25, 2024~ Sep. 29, 2024	Feb. 14, 2025	Radiation (03CH15-HY)
Preamplifier	EM Electronics	EM01G18G	060802	1GHz~18GHz	Feb. 29, 2024	Sep. 25, 2024~ Sep. 29, 2024	Feb. 28, 2025	Radiation (03CH15-HY)
Preamplifier	EMEC	EM18G40G	060801	18GHz~40GHz	May 27, 2024	Sep. 25, 2024~ Sep. 29, 2024	May 26, 2025	Radiation (03CH15-HY)
Spectrum Analyzer	Keysight	N9010B	MY60241058	10Hz~44GHz	Jul. 11, 2024	Sep. 25, 2024~ Sep. 29, 2024	Jul. 10, 2025	Radiation (03CH15-HY)
Antenna Mast	ChainTek	MBS-520-1	N/A	1m~4m	N/A	Sep. 25, 2024~ Sep. 29, 2024	N/A	Radiation (03CH15-HY)
Turn Table	ChainTek	T-200-S-1	N/A	0~360 Degree	N/A	Sep. 25, 2024~ Sep. 29, 2024	N/A	Radiation (03CH15-HY)
Software	Audix	E3_V9_230621	RK-002394	N/A	N/A	Sep. 25, 2024~ Sep. 29, 2024	N/A	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 104, 102E	MY582185/4, 519228/2,803 950/2	N/A	Jun. 11, 2024	Sep. 25, 2024~ Sep. 29, 2024	Jun. 10, 2025	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,804 012/2	18-40G	Jan. 02, 2024	Sep. 25, 2024~ Sep. 29, 2024	Jan. 01, 2025	Radiation (03CH15-HY)
Filter	Wainwright	WHKX8-5872.5-6 750-18000-40ST	SN6	3GHz High Pass Filter	Jun. 05, 2024	Sep. 25, 2024~ Sep. 29, 2024	Jun. 04, 2025	Radiation (03CH15-HY)
Filter	Wainwright	WHKX8-5872.5-6 750-18000-40ST	SN6	6.75GHz High Pass Filter	Jun. 05, 2024	Sep. 25, 2024~ Sep. 29, 2024	Jun. 04, 2025	Radiation (03CH15-HY)
Filter	Wainwright	WHKX12-900-100 0-15000-60SS	SN12	1GHz High Pass Filter	Sep. 10, 2024	Sep. 25, 2024~ Sep. 29, 2024	Sep. 09, 2025	Radiation (03CH15-HY)
Filter	Wainwright	WLJ4-1000-1530-6000-40ST	SN4	1.53GHz Low Pass Filter	Jun. 05, 2024	Sep. 25, 2024~ Sep. 29, 2024	Jun. 04, 2025	Radiation (03CH15-HY)
Hygrometer	TECPEL	DTM-302	SN4	N/A	Aug. 29, 2024	Sep. 25, 2024~ Sep. 29, 2024	Aug. 28, 2025	Radiation (03CH15-HY)
Radio Communication Analyzer	Anritsu	MT8821C	6262025353	LTE FDD/TDD LTE-2CC DLCA/ULCA	Oct. 03, 2023	Sep. 20, 2024~ Oct. 01, 2024	Oct. 02, 2024	Conducted (TH03-HY)
Radio Communication Analyzer	Anritsu	MT8821C	6262025353	LTE FDD/TDD LTE-2CC DLCA/ULCA	Oct. 01, 2024	Oct. 02, 2024~ Oct. 15, 2024	Sep. 30, 2025	Conducted (TH03-HY)
Coupler+10dB+ RFcable	Warison + WoKen + E-Instument	20dB 25W SMA Directional Coupler+ 10dB 18GHz_5W+SFL4 05_1.5M	#A+#1+#1+#7	1-18GHz	Jan. 02, 2024	Sep. 20, 2024~ Oct. 15, 2024	Jan. 01, 2025	Conducted (TH03-HY)
Software	Sporton	LTE Conducted Test Tools	N/A	Conducted Test Item	N/A	Sep. 20, 2024~ Oct. 15, 2024	N/A	Conducted (TH03-HY)
Hygrometer	TECPEL	DTM-303B	TP210073	-10 ~ 50°C / 20 ~ 95%RH	Jun. 05, 2024	Sep. 20, 2024~ Oct. 15, 2024	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 = 2Uc(y))	3.02 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.57 dB

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	3.97 dB

Appendix A. Test Results of Conducted Test

Conducted Output Power(Average power & EIRP)

LTE Band 48 Maximum Average Power [dBm] (GT - LC = 0.96 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	20.68	20.71	20.97	21.93	0.1560
20	1	0	16-QAM	19.70	19.72	19.97	20.93	0.1239
Limit	EIRP < 23dBm/10MHz			Result			Pass	

LTE Band 48 Maximum Average Power [dBm] (GT - LC = 0.96 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	20.61	20.70	20.88	21.84	0.1528
15	1	0	16-QAM	19.61	19.62	19.94	20.90	0.1230
Limit	EIRP < 23dBm/10MHz			Result			Pass	

LTE Band 48 Maximum Average Power [dBm] (GT - LC = 0.96 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	20.58	20.69	20.87	21.83	0.1524
10	1	0	16-QAM	19.63	19.71	19.93	20.89	0.1227
Limit	EIRP < 23dBm/10MHz			Result			Pass	

LTE Band 48 Maximum Average Power [dBm] (GT - LC = 0.96 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	20.64	20.68	20.88	21.84	0.1528
5	1	0	16-QAM	19.64	19.64	19.91	20.87	0.1222
Limit	EIRP < 23dBm/10MHz			Result			Pass	

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

LTE Band 42 Maximum Average Power [dBm] (GT - LC = 0.31 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	21.12	21.19	21.17	21.50	0.1413
20	1	0	16-QAM	20.89	21.08	21.04	21.39	0.1377
Limit	EIRP < 23dBm/10MHz			Result			Pass	

LTE Band 42 Maximum Average Power [dBm] (GT - LC = 0.31 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	21.08	21.09	21.07	21.40	0.1380
15	1	0	16-QAM	20.79	21.03	20.97	21.34	0.1361
Limit	EIRP < 23dBm/10MHz			Result			Pass	

LTE Band 42 Maximum Average Power [dBm] (GT - LC = 0.31 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	21.09	21.18	21.15	21.49	0.1409
10	1	0	16-QAM	20.87	21.06	20.93	21.37	0.1371
Limit	EIRP < 23dBm/10MHz			Result			Pass	

LTE Band 42 Maximum Average Power [dBm] (GT - LC = 0.31 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	21.12	21.17	21.13	21.48	0.1406
5	1	0	16-QAM	20.78	20.94	20.99	21.30	0.1349
Limit	EIRP < 23dBm/10MHz			Result			Pass	

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

LTE Band 43 Maximum Average Power [dBm] (GT - LC = 0.71 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
20	1	0	QPSK	20.91	21.09	20.96	21.80	0.1514
20	1	0	16-QAM	20.62	20.97	20.75	21.68	0.1472
Limit	EIRP < 23dBm/10MHz			Result			Pass	

LTE Band 43 Maximum Average Power [dBm] (GT - LC = 0.71 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
15	1	0	QPSK	20.88	21.08	20.93	21.79	0.1510
15	1	0	16-QAM	20.60	20.87	20.75	21.58	0.1439
Limit	EIRP < 23dBm/10MHz			Result			Pass	

LTE Band 43 Maximum Average Power [dBm] (GT - LC = 0.71 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
10	1	0	QPSK	20.90	21.01	20.91	21.72	0.1486
10	1	0	16-QAM	20.51	20.79	20.71	21.50	0.1413
Limit	EIRP < 23dBm/10MHz			Result			Pass	

LTE Band 43 Maximum Average Power [dBm] (GT - LC = 0.71 dB)								
BW [MHz]	RB Size	RB Offset	Mod	Lowest	Middle	Highest	EIRP (dBm)	EIRP (W)
5	1	0	QPSK	20.81	21.05	20.95	21.76	0.1500
5	1	0	16-QAM	20.51	20.81	20.78	21.52	0.1419
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 = 0.96 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	19.62	19.74	19.90	20.86	0.1219
20+20	1	99	1	0	16-QAM	19.11	19.27	19.41	20.37	0.1089
20+15	1	74	1	0	QPSK	19.85	20.02	20.13	21.09	0.1285
20+15	1	74	1	0	16-QAM	19.40	19.52	19.63	20.59	0.1146
15+20	1	74	1	0	QPSK	20.01	20.13	20.27	21.23	0.1327
15+20	1	74	1	0	16-QAM	19.55	19.66	19.77	20.73	0.1183
20+10	1	99	1	0	QPSK	19.84	19.97	20.06	21.02	0.1265
20+10	1	99	1	0	16-QAM	19.35	19.49	19.53	20.49	0.1119
10+20	1	49	1	0	QPSK	19.85	19.94	20.08	21.04	0.1271
10+20	1	49	1	0	16-QAM	19.34	19.49	19.57	20.53	0.1130
20+5	1	99	1	0	QPSK	19.81	19.96	20.06	21.02	0.1265
20+5	1	99	1	0	16-QAM	19.31	19.46	19.52	20.48	0.1117
5+20	1	24	1	0	QPSK	19.83	20.00	20.11	21.07	0.1279
5+20	1	24	1	0	16-QAM	19.36	19.46	19.56	20.52	0.1127
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 = 0.31 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	21.51	21.52	21.56	21.87	0.1538
20+20	1	99	1	0	16-QAM	21.07	21.10	21.11	21.42	0.1387
20+15	1	74	1	0	QPSK	21.60	21.52	21.55	21.91	0.1552
20+15	1	74	1	0	16-QAM	21.08	21.07	21.09	21.40	0.1380
15+20	1	74	1	0	QPSK	21.64	21.60	21.60	21.95	0.1567
15+20	1	74	1	0	16-QAM	21.09	21.12	21.13	21.44	0.1393
20+10	1	99	1	0	QPSK	21.38	21.39	21.46	21.77	0.1503
20+10	1	99	1	0	16-QAM	20.94	20.96	20.98	21.29	0.1346
10+20	1	49	1	0	QPSK	21.42	21.37	21.39	21.73	0.1489
10+20	1	49	1	0	16-QAM	20.89	20.91	20.94	21.25	0.1334
20+5	1	99	1	0	QPSK	21.31	21.35	21.43	21.74	0.1493
20+5	1	99	1	0	16-QAM	20.86	20.91	20.96	21.27	0.1340
5+20	1	24	1	0	QPSK	21.35	21.37	21.42	21.73	0.1489
5+20	1	24	1	0	16-QAM	20.86	20.86	20.93	21.24	0.1330
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)	Amp\Cbl (dB)	Filter (dB)	EIRPCF (dB)	Reading (dBuV)	Limit (dBm)	Margin (dB)	Pol	Ant
1	Part 96	LTE CA B48C	L	14275	-56.28	RMS	40.25	-43.79	0.66	-95.23	41.83	-40.00	-16.28	H	8

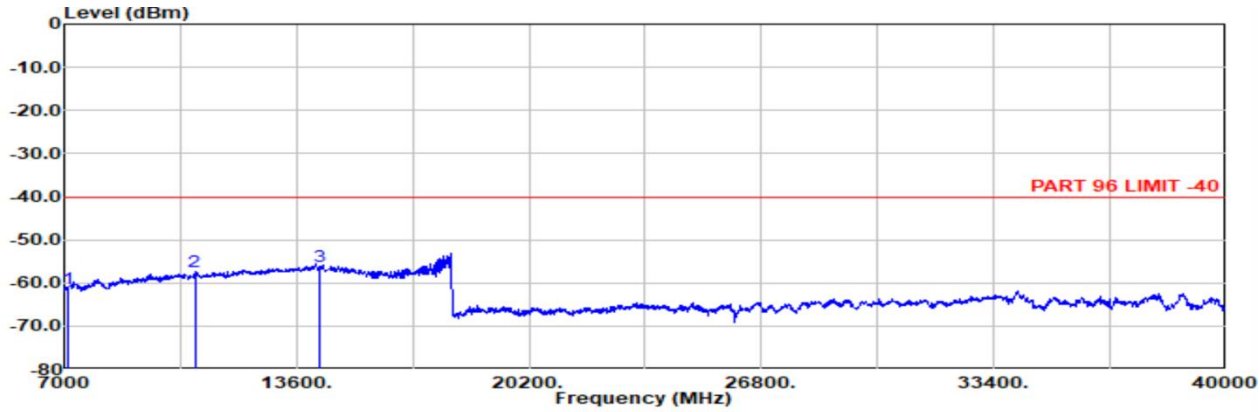
Ant 8

Worst plane : NB with Accessory

Part 96 Mode 1

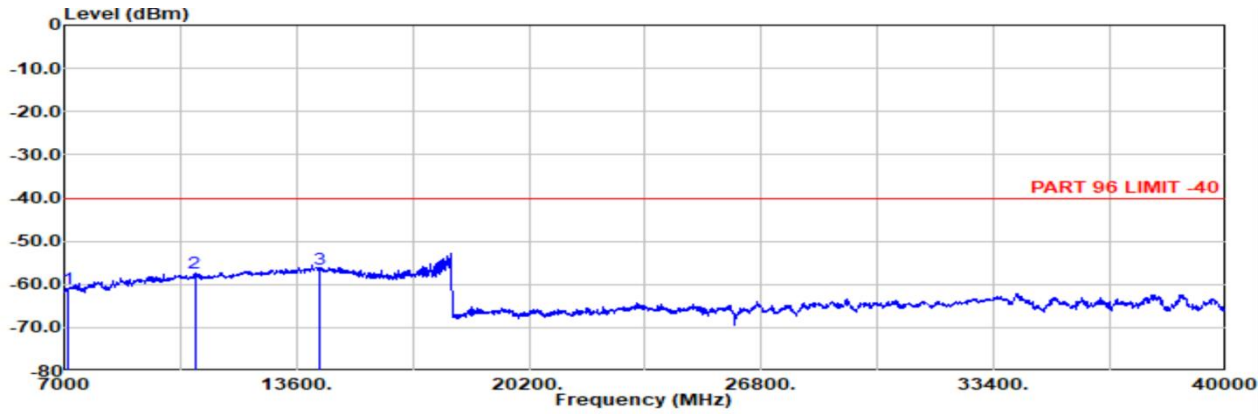
LTE CA B48C 20M + 20M Ch55340 1RB99 QPSK + Ch55538 1RB0 QPSK

L



Site : 03CH15-HY
Condition: PART 96 LIMIT -40 3m BBHA 9120 D_9120D-02294 Horizontal
: LTE Band 48C 20M Ch55340 1RB99 QPSK
: LTE Band 48C 20M Ch55538 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7132.00	-61.16	RMS	36.59	-49.80	1.00	-95.23	0.00	-40.00	-21.16	Horizontal
2	10706.00	-57.30	RMS	39.00	-46.70	0.89	-95.23	44.74	-40.00	-17.30	Horizontal
3	14275.00	-56.28	RMS	40.25	-43.79	0.66	-95.23	41.83	-40.00	-16.28	Horizontal



Site : 03CH15-HY
Condition: PART 96 LIMIT -40 3m BBHA 9120 D_9120D-02294 Vertical
: LTE Band 48C 20M Ch55340 1RB99 QPSK
: LTE Band 48C 20M Ch55538 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7132.00	-60.88	RMS	36.59	-49.80	1.00	-95.23	46.56	-40.00	-20.88	Vertical
2	10706.00	-57.36	RMS	39.00	-46.70	0.89	-95.23	44.68	-40.00	-17.36	Vertical
3	14275.00	-56.33	RMS	40.25	-43.79	0.66	-95.23	41.78	-40.00	-16.33	Vertical

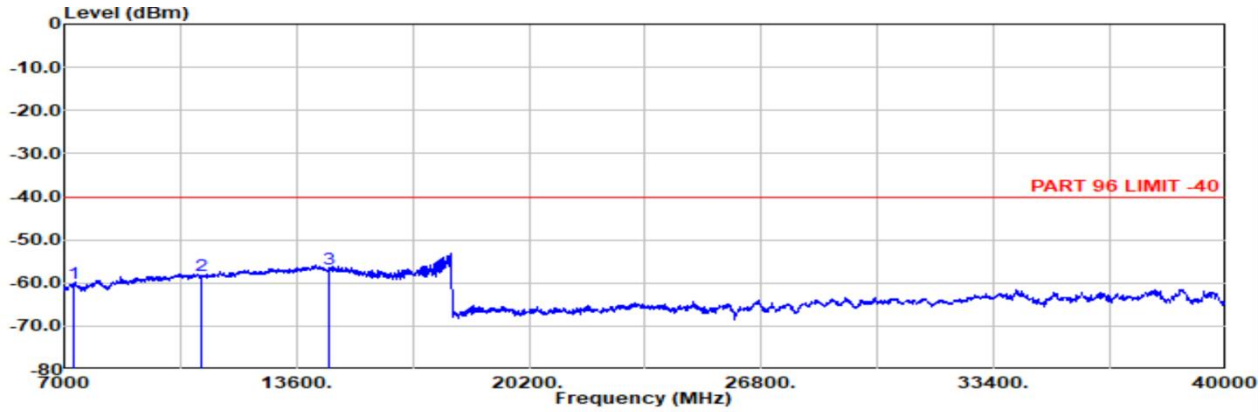
Ant 8

Worst plane : NB with Accessory

Part 96 Mode 1

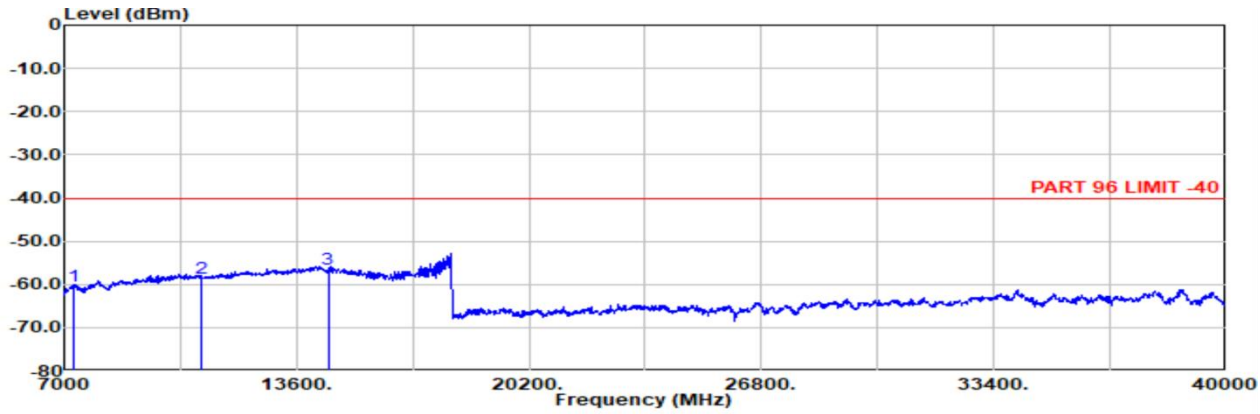
LTE CA B48C 20M + 20M Ch55891 1RB99 QPSK + Ch56089 1RB0 QPSK

M




```
Site      : 03CH15-HY
Condition: PART 96 LIMIT -40 3m BBHA 9120 D_9120D-02294 Horizontal
         : LTE Band 48C 20M Ch55891 1RB99 QPSK
         : LTE Band 48C 20M Ch56089 1RB0 QPSK
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7253.00	-60.10	RMS	36.90	-49.82	1.01	-95.23	47.04	-40.00	-20.10	Horizontal
2	10872.00	-58.28	RMS	38.93	-46.53	0.90	-95.23	43.65	-40.00	-18.28	Horizontal
3	14496.00	-56.67	RMS	40.00	-43.76	0.70	-95.23	41.62	-40.00	-16.67	Horizontal




```
Site      : 03CH15-HY
Condition: PART 96 LIMIT -40 3m BBHA 9120 D_9120D-02294 Vertical
         : LTE Band 48C 20M Ch55891 1RB99 QPSK
         : LTE Band 48C 20M Ch56089 1RB0 QPSK
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7248.00	-60.26	RMS	36.90	-49.81	1.01	-95.23	46.87	-40.00	-20.26	Vertical
2	10872.00	-58.46	RMS	38.93	-46.53	0.90	-95.23	43.47	-40.00	-18.46	Vertical
3	14491.00	-56.44	RMS	39.99	-43.76	0.70	-95.23	41.86	-40.00	-16.44	Vertical

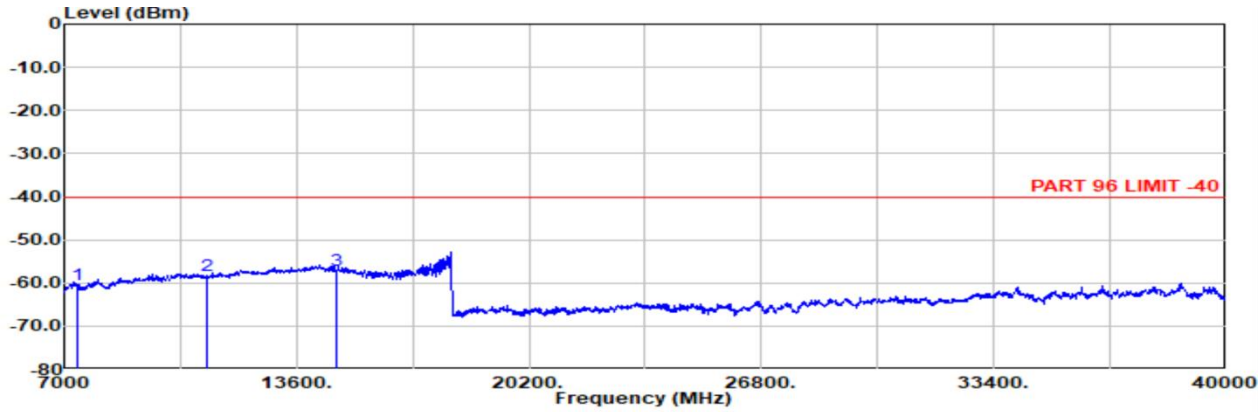
Ant 8

Worst plane : NB with Accessory

Part 96 Mode 1

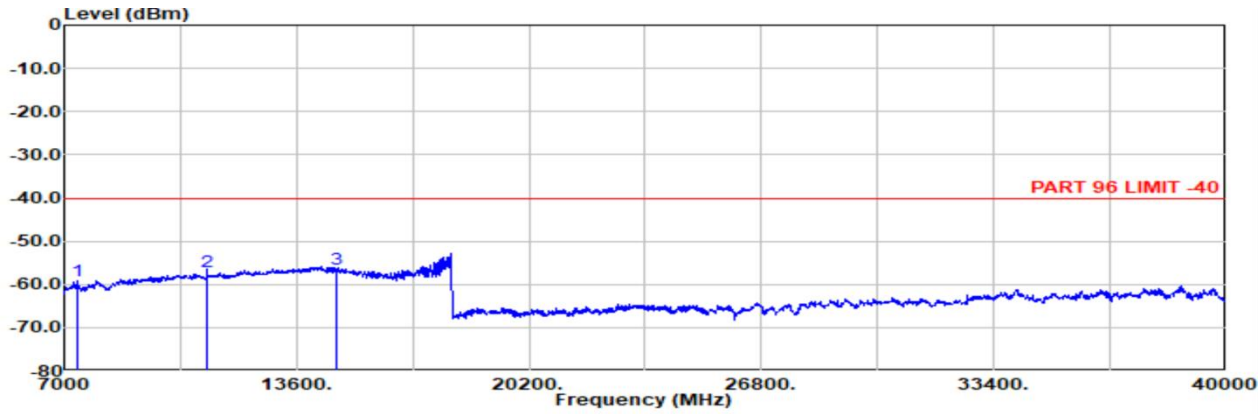
LTE CA B48C 20M + 20M Ch56442 1RB99 QPSK + Ch56640 1RB0 QPSK

H



Site : 03CH15-HY
Condition: PART 96 LIMIT -40 3m BBHA 9120 D_9120D-02294 Horizontal
: LTE Band 48C 20M Ch56442 1RB99 QPSK
: LTE Band 48C 20M Ch56640 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7358.00	-60.40	RMS	36.65	-49.83	1.06	-95.23	46.95	-40.00	-20.40	Horizontal
2	11037.00	-58.40	RMS	38.66	-46.34	0.91	-95.23	43.60	-40.00	-18.40	Horizontal
3	14711.00	-56.96	RMS	39.79	-43.73	0.74	-95.23	41.47	-40.00	-16.96	Horizontal



Site : 03CH15-HY
Condition: PART 96 LIMIT -40 3m BBHA 9120 D_9120D-02294 Vertical
: LTE Band 48C 20M Ch56442 1RB99 QPSK
: LTE Band 48C 20M Ch56640 1RB0 QPSK

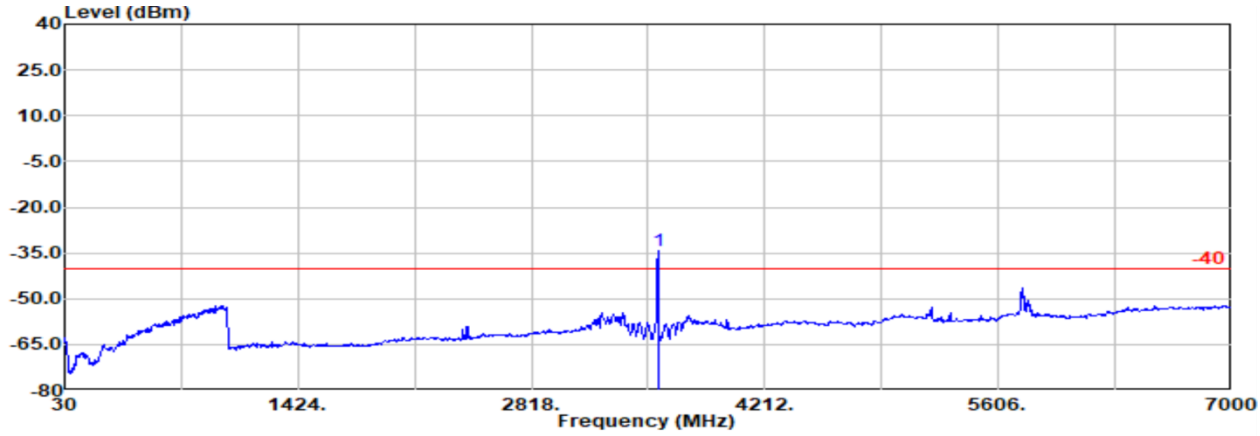
	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	7363.00	-59.18	RMS	36.62	-49.83	1.06	-95.23	48.20	-40.00	-19.18	Vertical
2	11037.00	-57.01	RMS	38.66	-46.34	0.91	-95.23	44.99	-40.00	-17.01	Vertical
3	14716.00	-56.47	RMS	39.78	-43.73	0.74	-95.23	41.97	-40.00	-16.47	Vertical

Ant 8

Part 96 Mode 1

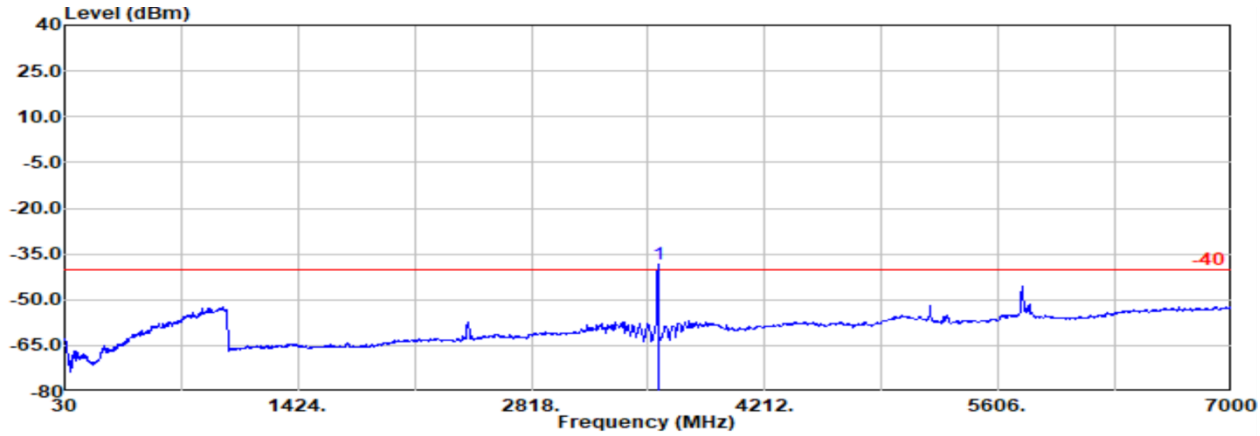
LTE CA B48C 20M + 20M Ch55340 1RB99 QPSK + Ch55538 1RB0 QPSK

L




```
Site      : 03CH15-HY
Condition: -40 3m CBL 6111D & 00800N1D01N-06_41912&05 Horizontal
         : LTE Band 48C 20M Ch55340 1RB99 QPSK
         : LTE Band 48C 20M Ch55538 1RB0 QPSK
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3574.00	-34.43	RMS	--	6.93	0.00	-95.23	0.00	-40.00	5.57	Horizontal




```
Site      : 03CH15-HY
Condition: -40 3m CBL 6111D & 00800N1D01N-06_41912&05 Vertical
         : LTE Band 48C 20M Ch55340 1RB99 QPSK
         : LTE Band 48C 20M Ch55538 1RB0 QPSK
```

	Freq	Level	Detector	Ant Factor	Amp\Cb l	Filter	EIRPCF	Readin g	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3574.00	-38.45	RMS	--	6.93	0.00	-95.23	549.85	-40.00	1.55	Vertical

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