FCC CO-LOCATION 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, 24(E)**

The product was received on Sep. 09, 2024 and testing was performed from Sep. 25, 2024 to Sep. 29, 2024. 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 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
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

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History of this test report

Report No.	Version	Description	Issue Date
FG490504F	01	Initial issue of report	Nov. 20, 2024
FG490504F	02	Revise Section 2.1 This report is an updated version, replacing the report issued on Nov. 20, 2024.	Dec. 04, 2024

Summary of Test Result

Report Clause	Ref Std. Clause	Test Items	Result (PASS/FAIL)	Remark
3.2	§2.1053 §24.238 (a)	Radiated Spurious Emission (Band 2)	Pass	36.63 dB under the limit at 5688.00 MHz

Conformity Assessment Condition:

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

Disclaimer:

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

Reviewed by: Sheng Kuo

Report Producer: Ming Chen

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

WWAN Antenna Information for Notebook Mode				
Antenna 8	**Manufacturer**	Vendor 2	**Peak gain (dBi)**	LTE Band 25 : -0.04
	Part number	6036B0361301 (81ELBF15.G04)	**Type**	PIFA
	Manufacturer	Vendor 1	**Peak gain (dBi)**	LTE Band 25 : 0.86
	Part number	6036B0361401 (00-350270155N)	**Type**	PIFA

WWAN Antenna Information for Tablet Mode				
Antenna 8	**Manufacturer**	Vendor 2	**Peak gain (dBi)**	LTE Band 25 : -2.76
	Part number	6036B0361301 (81ELBF15.G04)	**Type**	PIFA
	Manufacturer	Vendor 1	**Peak gain (dBi)**	LTE Band 25 : -1.36
	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 Location

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
Test Engineer	Sam Pan, Quentin Liu and Bigshow Wang
Temperature (℃)	22~23.5
Relative Humidity (%)	50~59

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

FCC Designation No.: TW3786

1.4 Applicable Standards

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

- ANSI C63.26-2015
- FCC 47 CFR Part 2, 24(E)
- FCC KDB 971168 D01 Power Meas. License Digital Systems v03r01
- FCC KDB Publication No. 558074 D01 DTS Meas. Guidance v05r02
- FCC KDB 789033 D02 General UNII Test Procedures New Rules v02r01.
- FCC KDB 987594 D02 U-NII 6 GHz EMC Measurement v01r01
- FCC KDB 414788 D01 Radiated Test Site v01r01.
- FCC KDB 662911 D01 Multiple Transmitter Output v02r01.

Remark:

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

2 Test Configuration of Equipment Under Test

2.1 Test Mode

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

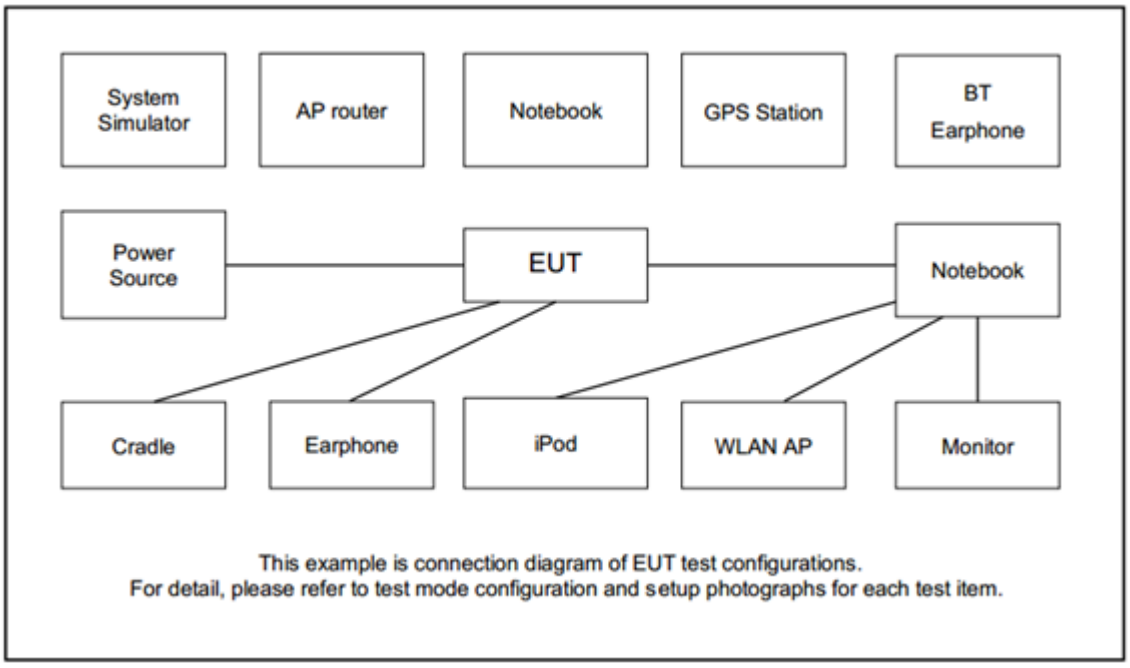
Modulation Type	Modulation
A	QPSK
B	16QAM

Test Item	Modulation Type	Bandwidth	RB Size	Channel
RSE	A	20 MHz	Inner_1RB	L, M, H

Remark:

1. Evaluated all the transmitter signal and reporting worst-case configuration among all modulation types.
2. The device is investigated from 30MHz to 10 times of fundamental signal for radiated spurious emission test under different RB size/offset and modulations in exploratory test. Subsequently, only the worst-case emissions are reported.
3. During the RSE preliminary test, the standalone mode and charging modes were verified. It is determined that the charging modes is the worst case for the official test.
4. All the radiated test cases were performed with Sample 1.
5. For Co-location test item, the test plan are list below:
   - LTE Band 25 + WLAN (2.4GHz)_802.11be EHT20_Ch07
   - LTE Band 25 + WLAN (5GHz)_802.11n HT20_Ch149
   - LTE Band 25 + WLAN (6GHz)_802.11be EHT40_Ch91

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

2.4 Frequency List of Low/Middle/High Channels

LTE Band 25 Channel and Frequency List				
BW [MHz]	Channel/Frequency(MHz)	Lowest	Middle	Highest
20	Channel	26140	26340	26590
	Frequency	1860	1880	1905

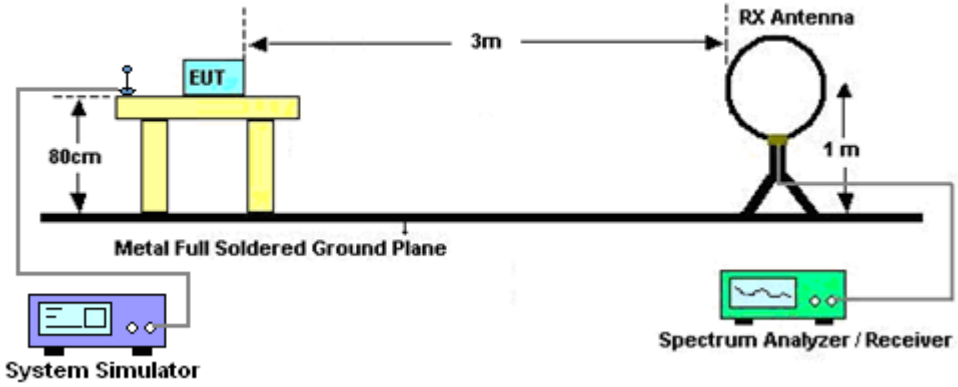
3 Radiated Test Items

3.1 Measuring Instruments

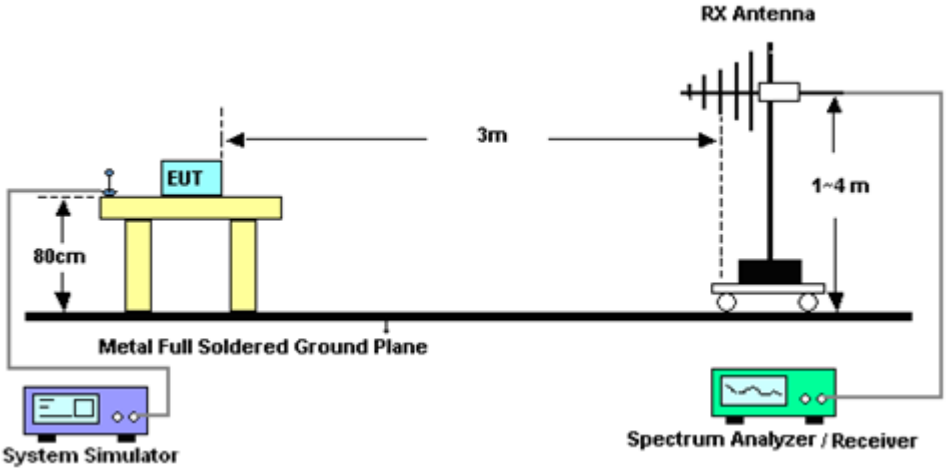
See list of measuring instruments of this test report.

3.1.1 Test Setup

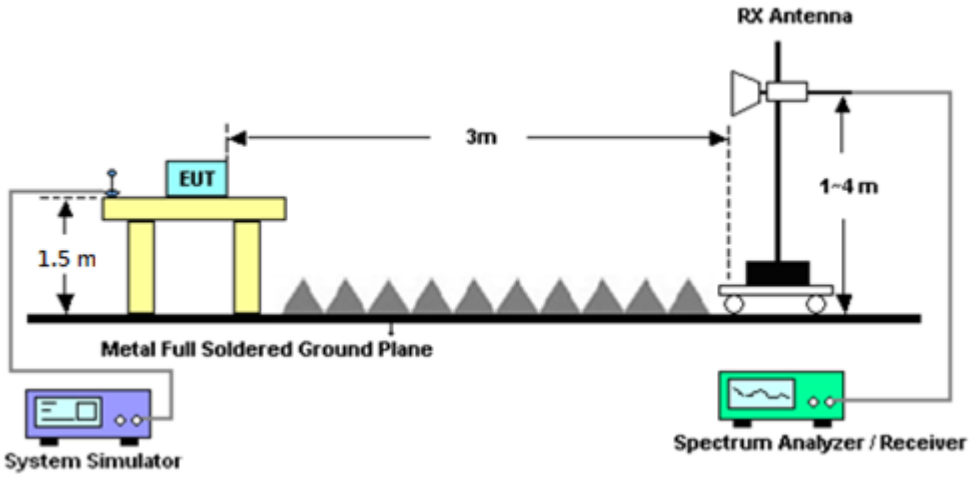
For radiated test below 30MHz



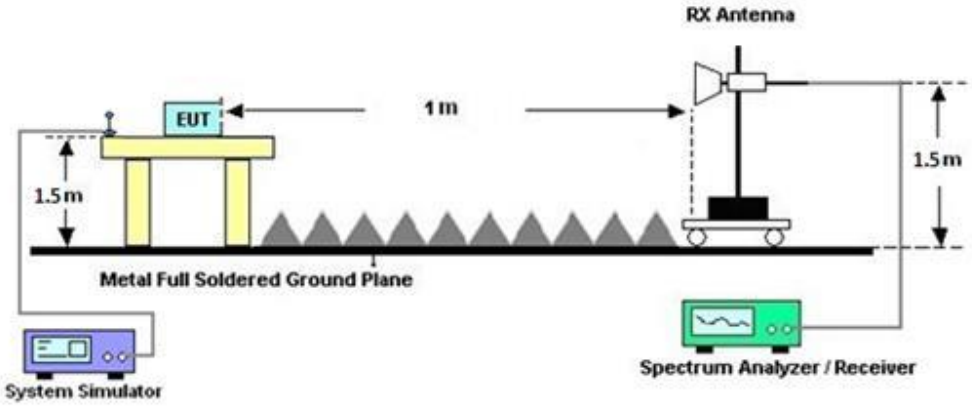
For radiated test from 30MHz to 1GHz



For radiated test from 1GHz to 18GHz



For radiated test above 18GHz



3.1.2 Test Result of Radiated Test

Please refer to Appendix 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.

3.2 Radiated Spurious Emission Measurement

3.2.1 Description of Radiated Spurious Emission Measurement

The radiated spurious emission was measured by substitution method according to ANSI 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 43 + 10 log (P) dB.

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

3.2.2 Test Procedures

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

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

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

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

4 List of Measuring Equipment

Instrument	Brand Name	Model No.	Serial No.	Characteristics	Calibration Date	Test Date	Due Date	Remark
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, 519228/2,803950/2	N/A	Jun. 11, 2024	Sep. 25, 2024~ Sep. 29, 2024	Jun. 10, 2025	Radiation (03CH15-HY)
RF Cable	HUBER + SUHNER	SUCOFLEX 102	804011/2,804012/2	18-40G	Jan. 02, 2024	Sep. 25, 2024~ Sep. 29, 2024	Jan. 01, 2025	Radiation (03CH15-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN6	3GHz High Pass Filter	Jun. 05, 2024	Sep. 25, 2024~ Sep. 29, 2024	Jun. 04, 2025	Radiation (03CH15-HY)
Filter	Wainwright	WHKX8-5872.5-6750-18000-40ST	SN6	6.75GHz High Pass Filter	Jun. 05, 2024	Sep. 25, 2024~ Sep. 29, 2024	Jun. 04, 2025	Radiation (03CH15-HY)
Filter	Wainwright	WHKX12-900-1000-15000-60SS	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)

5 Measurement Uncertainty

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

Measuring Uncertainty for a Level of Confidence of 95% (U = 2Uc(y))	**3.02 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**

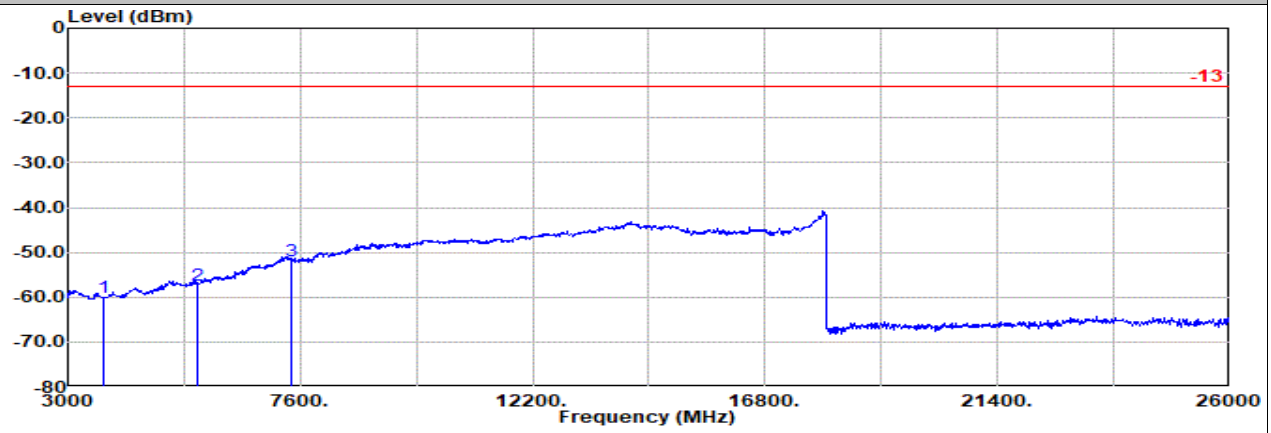
Appendix A. Test Results of Radiated Test

A1. Summary of each worse mode

Mode	Part	Band	Ch	Freq (MHz)	Level (dBm)	Det	Ant Factor (dB)	Amp\Cbl (dB)	Filter (dB)	EIRPCF (dB)	Reading (dBuV)	Limit (dBm)	Margin (dB)	Pol	Ant
6	Part 24E	LTE B25	M	7485	-51.45	RMS	36.23	-26.17	0.21	-95.23	33.51	-13.00	-38.45	H	8
7	Part 24E	LTE B25	H	5688	-49.63	RMS	33.60	-27.60	0.32	-95.23	39.28	-13.00	-36.63	H	8
8	Part 24E	LTE B25	M	7485	-51.49	RMS	36.23	-26.17	0.21	-95.23	33.47	-13.00	-38.49	H	8

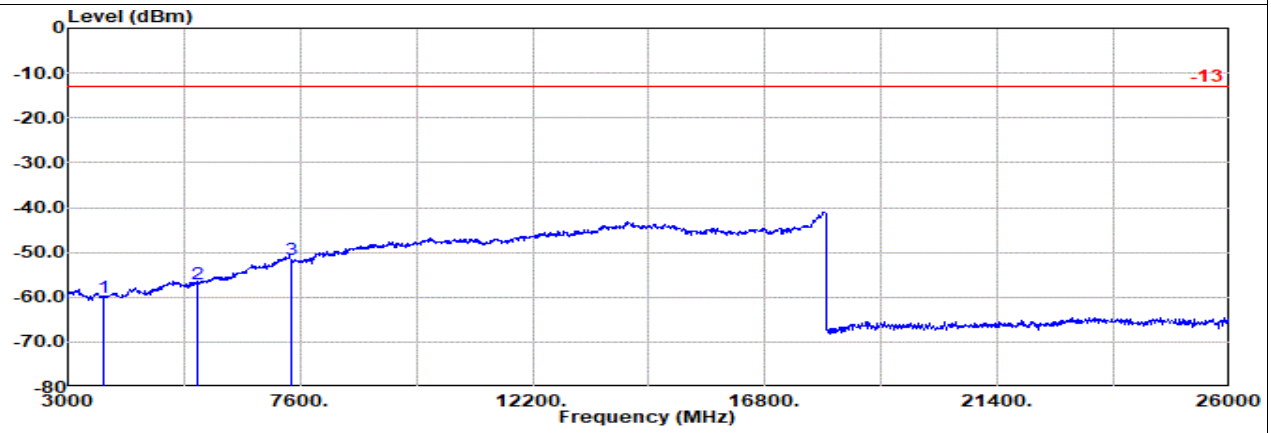
Ant.8

Part 24E Mode 6
LTE B25 20M Ch26140 1RB0 QPSK
L



Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Horizontal
Mode : LTE Band 25 20M Ch26140 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3702.00	-60.21	RMS	29.82	-29.46	0.81	-95.23	33.85	-13.00	-47.21	Horizontal
2	5553.00	-57.25	RMS	33.00	-27.67	0.35	-95.23	32.30	-13.00	-44.25	Horizontal
3	7410.00	-52.04	RMS	36.38	-26.20	0.26	-95.23	32.75	-13.00	-39.04	Horizontal

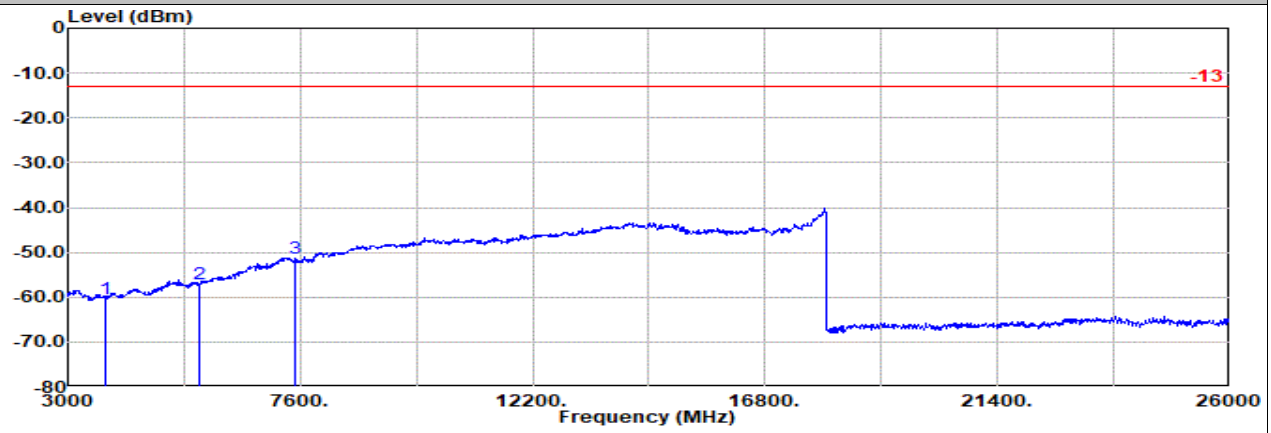


Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Vertical
Mode : LTE Band 25 20M Ch26140 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3705.00	-60.20	RMS	29.84	-29.46	0.80	-95.23	33.85	-13.00	-47.20	Vertical
2	5553.00	-57.16	RMS	33.00	-27.67	0.35	-95.23	32.39	-13.00	-44.16	Vertical
3	7405.00	-51.57	RMS	36.39	-26.20	0.27	-95.23	33.20	-13.00	-38.57	Vertical

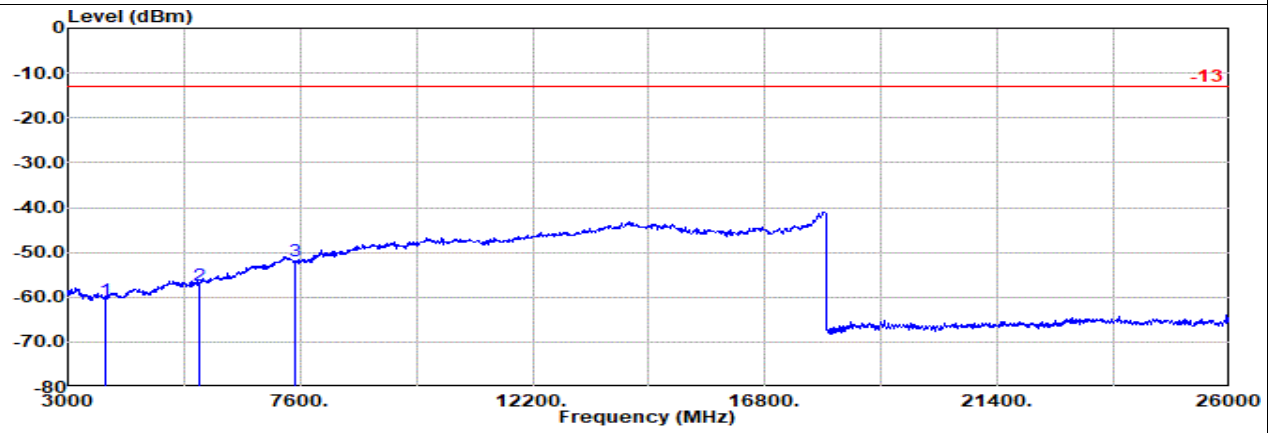
Ant.8

Part 24E Mode 6
LTE B25 20M Ch26340 1RB0 QPSK
M



Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Horizontal
Mode : LTE Band 25 20M Ch26340 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3742.00	-60.47	RMS	30.14	-29.44	0.76	-95.23	33.30	-13.00	-47.47	Horizontal
2	5613.00	-56.97	RMS	33.08	-27.66	0.34	-95.23	32.50	-13.00	-43.97	Horizontal
3	7485.00	-51.45	RMS	36.23	-26.17	0.21	-95.23	33.51	-13.00	-38.45	Horizontal

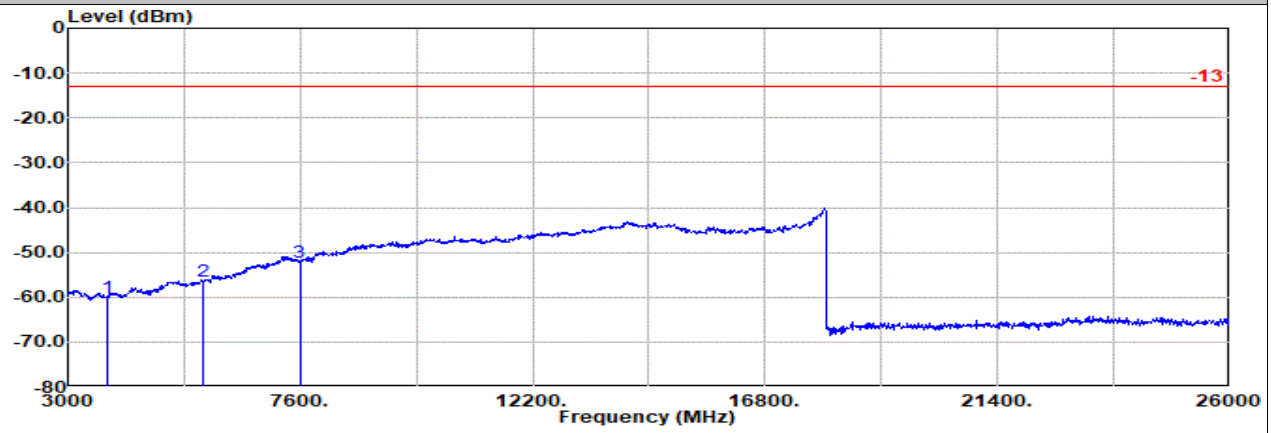


Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Vertical
Mode : LTE Band 25 20M Ch26340 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3735.00	-60.60	RMS	30.08	-29.44	0.76	-95.23	33.23	-13.00	-47.60	Vertical
2	5613.00	-57.33	RMS	33.08	-27.66	0.34	-95.23	32.14	-13.00	-44.33	Vertical
3	7485.00	-51.81	RMS	36.23	-26.17	0.21	-95.23	33.15	-13.00	-38.81	Vertical

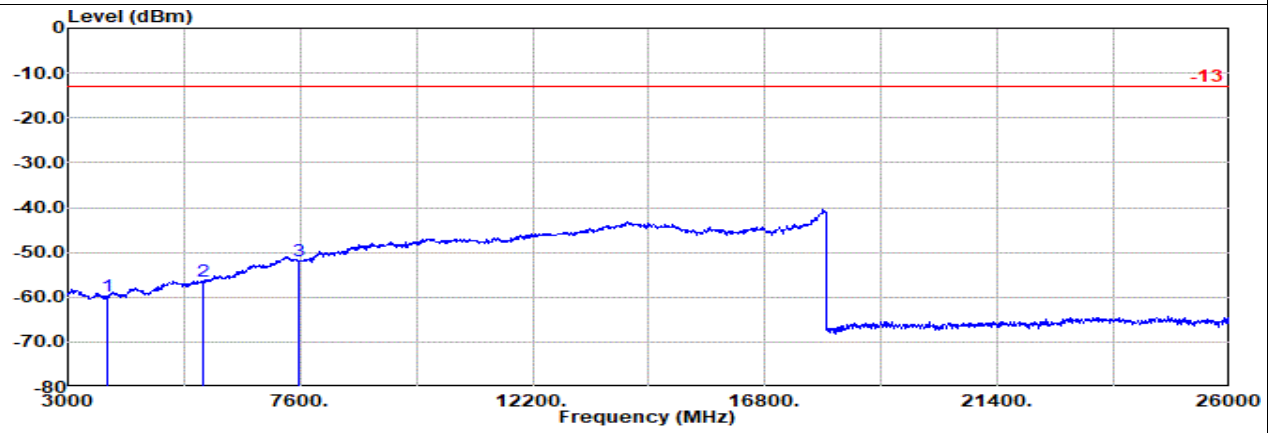
Ant.8

Part 24E Mode 6
LTE B25 20M Ch26590 1RB0 QPSK
H



Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Horizontal
Mode : LTE Band 25 20M Ch26590 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3792.00	-60.15	RMS	30.45	-29.41	0.69	-95.23	33.35	-13.00	-47.15	Horizontal
2	5688.00	-56.53	RMS	33.60	-27.60	0.32	-95.23	32.38	-13.00	-43.53	Horizontal
3	7590.00	-52.11	RMS	36.18	-26.18	0.13	-95.23	32.99	-13.00	-39.11	Horizontal



Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Vertical
Mode : LTE Band 25 20M Ch26590 1RB0 QPSK

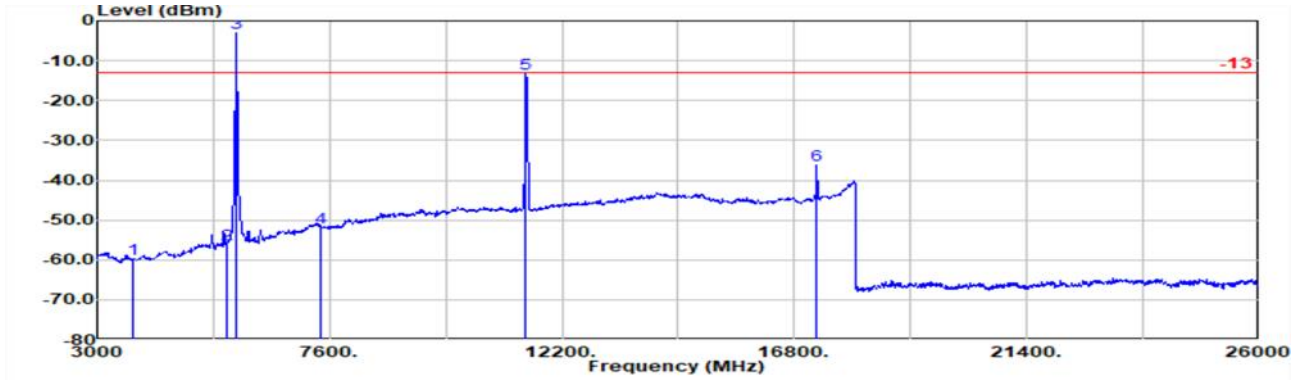
	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3795.00	-59.91	RMS	30.47	-29.41	0.69	-95.23	33.57	-13.00	-46.91	Vertical
2	5688.00	-56.32	RMS	33.60	-27.60	0.32	-95.23	32.59	-13.00	-43.32	Vertical
3	7585.00	-51.94	RMS	36.17	-26.18	0.13	-95.23	33.17	-13.00	-38.94	Vertical

Ant.8

Part 24E Mode 7

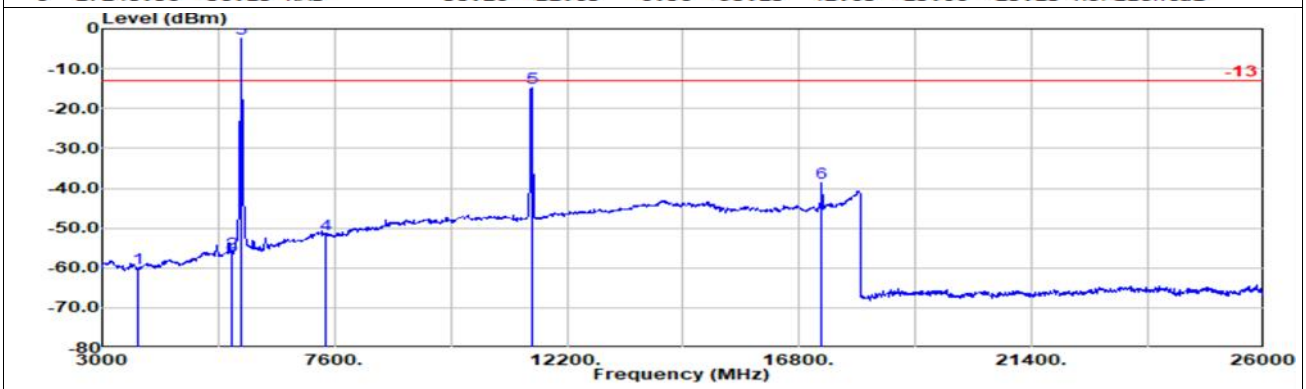
LTE B25 20M Ch26140 1RB0 QPSK

L



Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Horizontal
Mode : LTE Band 25 20M Ch26140 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3702.00	-59.73	RMS	29.82	-29.46	0.81	-95.23	-59.71	-13.00	-46.73	Horizontal
2	5553.00	-56.26	RMS	33.00	-27.67	0.35	-95.23	33.29	-13.00	-43.26	Horizontal
3	5760.00	-3.14	RMS	33.86	-27.54	0.30	-95.23	85.47	-13.00	9.86	Horizontal
4	7410.00	-51.82	RMS	36.38	-26.20	0.26	-95.23	32.97	-13.00	-38.82	Horizontal
5	11487.00	-13.15	RMS	38.91	-24.37	0.16	-95.23	67.38	-13.00	-0.15	Horizontal
6	17248.50	-36.13	RMS	38.20	-21.63	0.50	-95.23	42.03	-13.00	-23.13	Horizontal



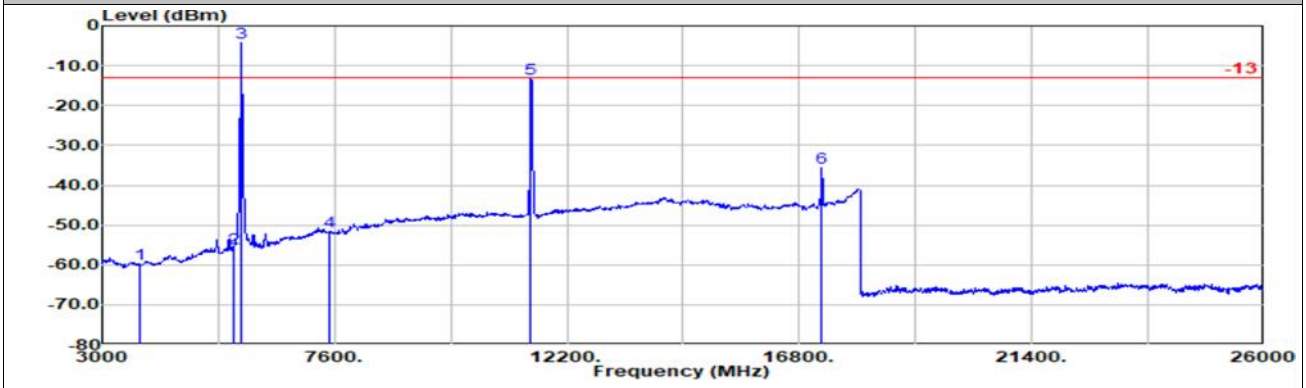
Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Vertical
Mode : LTE Band 25 20M Ch26140 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3705.00	-60.11	RMS	29.84	-29.46	0.80	-95.23	33.94	-13.00	-47.11	Vertical
2	5553.00	-56.27	RMS	33.00	-27.67	0.35	-95.23	33.28	-13.00	-43.27	Vertical
3	5760.00	-2.46	RMS	33.86	-27.54	0.30	-95.23	86.15	-13.00	10.54	Vertical
4	7405.00	-51.58	RMS	36.39	-26.20	0.27	-95.23	33.19	-13.00	-38.58	Vertical
5	11498.50	-14.81	RMS	38.90	-24.37	0.16	-95.23	65.73	-13.00	-1.81	Vertical
6	17237.00	-38.66	RMS	38.20	-21.64	0.50	-95.23	39.51	-13.00	-25.66	Vertical

Remark : # 3, 5, 6 is Wifi signal.

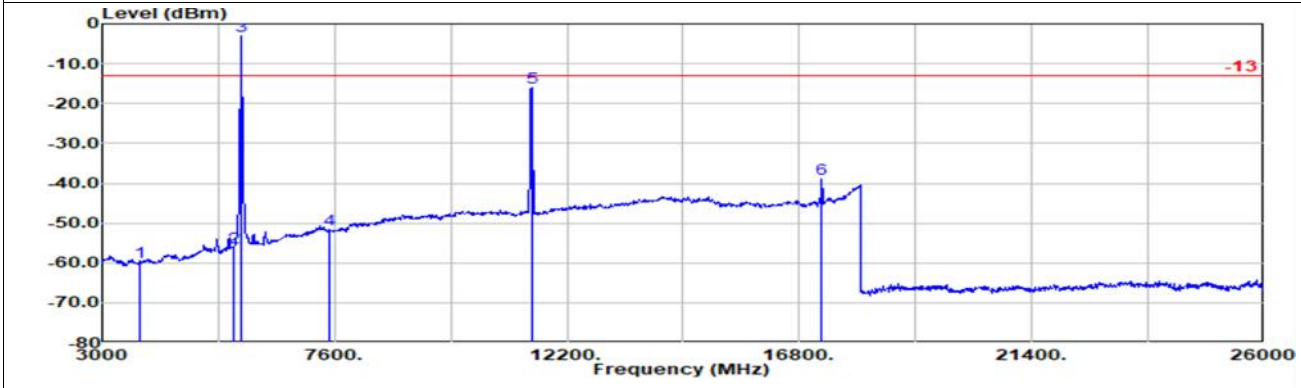
Ant.8

Part 24E Mode 7
LTE B25 20M Ch26340 1RB0 QPSK
M



Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Horizontal
Mode : LTE Band 25 20M Ch26340 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3742.00	-59.82	RMS	30.14	-29.44	0.76	-95.23	33.95	-13.00	-46.82	Horizontal
2	5613.00	-55.82	RMS	33.08	-27.66	0.34	-95.23	33.65	-13.00	-42.82	Horizontal
3	5745.00	-4.12	RMS	33.80	-27.55	0.30	-95.23	84.56	-13.00	8.88	Horizontal
4	7485.00	-51.57	RMS	36.23	-26.17	0.21	-95.23	33.39	-13.00	-38.57	Horizontal
5	11487.00	-13.21	RMS	38.91	-24.37	0.16	-95.23	67.32	-13.00	-0.21	Horizontal
6	17248.50	-35.60	RMS	38.20	-21.63	0.50	-95.23	42.56	-13.00	-22.60	Horizontal



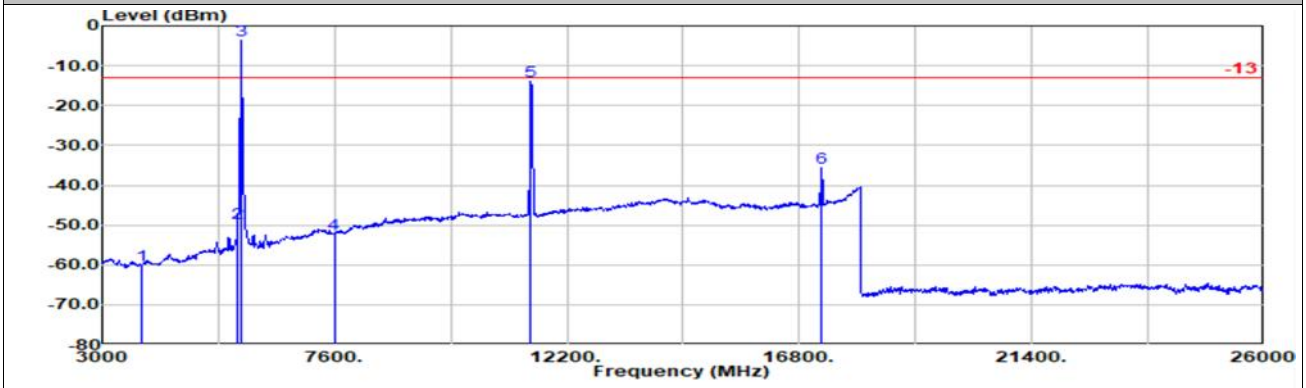
Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Vertical
Mode : LTE Band 25 20M Ch26340 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3735.00	-59.91	RMS	30.08	-29.44	0.76	-95.23	33.92	-13.00	-46.91	Vertical
2	5613.00	-56.01	RMS	33.08	-27.66	0.34	-95.23	33.46	-13.00	-43.01	Vertical
3	5745.00	-3.16	RMS	33.86	-27.54	0.30	-95.23	85.45	-13.00	9.84	Vertical
4	7485.00	-51.76	RMS	36.23	-26.17	0.21	-95.23	33.20	-13.00	-38.76	Vertical
5	11498.50	-15.98	RMS	38.90	-24.37	0.16	-95.23	64.56	-13.00	-2.98	Vertical
6	17248.50	-38.82	RMS	38.20	-21.63	0.50	-95.23	39.34	-13.00	-25.82	Vertical

Remark : # 3, 5, 6 is Wifi signal.

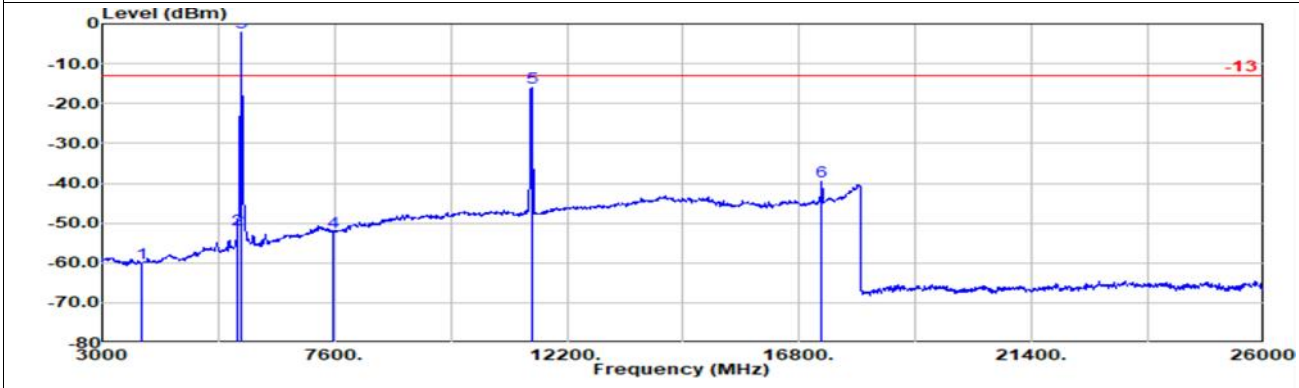
Ant.8

Part 24E Mode 7
LTE B25 20M Ch26590 1RB0 QPSK
H



Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Horizontal
Mode : LTE Band 25 20M Ch26590 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3792.00	-60.13	RMS	30.45	-29.41	0.69	-95.23	33.37	-13.00	-47.13	Horizontal
2	5688.00	-49.63	RMS	33.60	-27.60	0.32	-95.23	39.28	-13.00	-36.63	Horizontal
3	5760.00	-3.75	RMS	33.86	-27.54	0.30	-95.23	84.86	-13.00	9.25	Horizontal
4	7590.00	-52.14	RMS	36.18	-26.18	0.13	-95.23	32.96	-13.00	-39.14	Horizontal
5	11487.00	-13.96	RMS	38.91	-24.37	0.16	-95.23	66.57	-13.00	-0.96	Horizontal
6	17248.50	-35.55	RMS	38.20	-21.63	0.50	-95.23	42.61	-13.00	-22.55	Horizontal



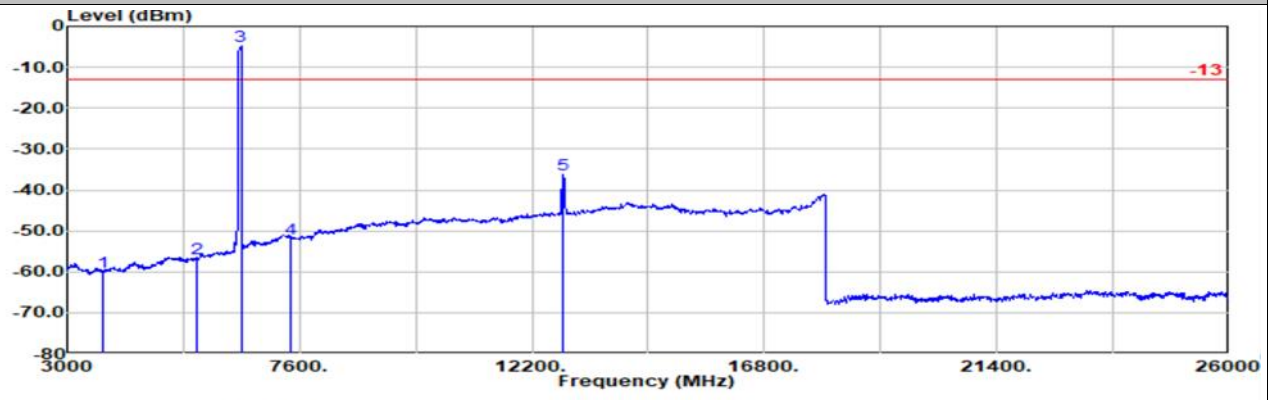
Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Vertical
Mode : LTE Band 25 20M Ch26590 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3795.00	-60.16	RMS	30.47	-29.41	0.69	-95.23	33.32	-13.00	-47.16	Vertical
2	5688.00	-51.77	RMS	33.60	-27.60	0.32	-95.23	37.14	-13.00	-38.77	Vertical
3	5760.00	-2.25	RMS	33.86	-27.54	0.30	-95.23	86.36	-13.00	10.75	Vertical
4	7585.00	-52.23	RMS	36.17	-26.18	0.13	-95.23	32.88	-13.00	-39.23	Vertical
5	11498.50	-16.02	RMS	38.90	-24.37	0.16	-95.23	64.52	-13.00	-3.02	Vertical
6	17237.00	-39.41	RMS	38.20	-21.64	0.50	-95.23	38.76	-13.00	-26.41	Vertical

Remark : # 3, 5, 6 is Wifi signal.

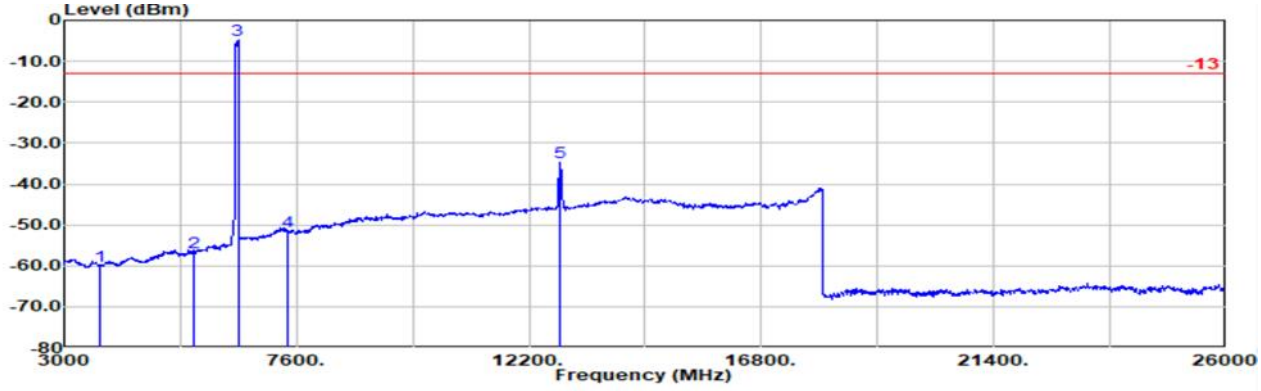
Ant.8

Part 24E Mode 8
LTE B25 20M Ch26140 1RB0 QPSK
L



Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Horizontal
Mode : LTE Band 25 20M Ch26140 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3702.00	-60.01	RMS	29.82	-29.46	0.81	-95.23	34.05	-13.00	-47.01	Horizontal
2	5550.00	-56.90	RMS	33.00	-27.67	0.35	-95.23	32.65	-13.00	-43.90	Horizontal
3	6438.50	-4.96	RMS	34.85	-26.81	0.36	-95.23	81.87	-13.00	8.04	Horizontal
4	7410.00	-51.89	RMS	36.38	-26.20	0.26	-95.23	32.90	-13.00	-38.89	Horizontal
5	12821.00	-36.10	RMS	39.82	-24.26	0.15	-95.23	43.42	-13.00	-23.10	Horizontal



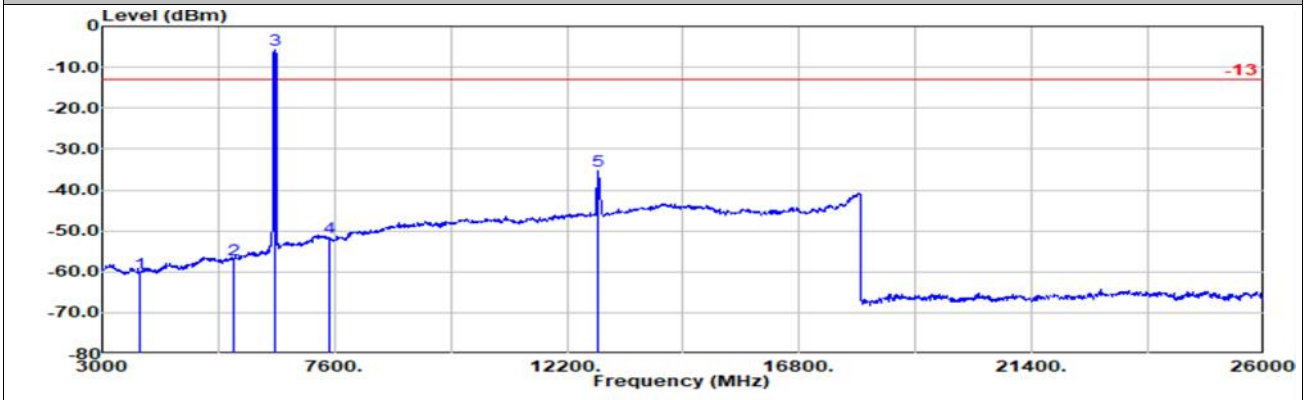
Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Vertical
Mode : LTE Band 25 20M Ch26140 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3705.00	-59.95	RMS	29.84	-29.46	0.80	-95.23	34.10	-13.00	-46.95	Vertical
2	5550.00	-56.76	RMS	33.00	-27.67	0.35	-95.23	32.79	-13.00	-43.76	Vertical
3	6438.50	-4.96	RMS	34.85	-26.81	0.36	-95.23	81.87	-13.00	8.04	Vertical
4	7405.00	-51.60	RMS	36.39	-26.20	0.27	-95.23	33.17	-13.00	-38.60	Vertical
5	12809.50	-34.57	RMS	39.81	-24.26	0.15	-95.23	44.96	-13.00	-21.57	Vertical

Remark : # 3, 5 is Wifi signal.

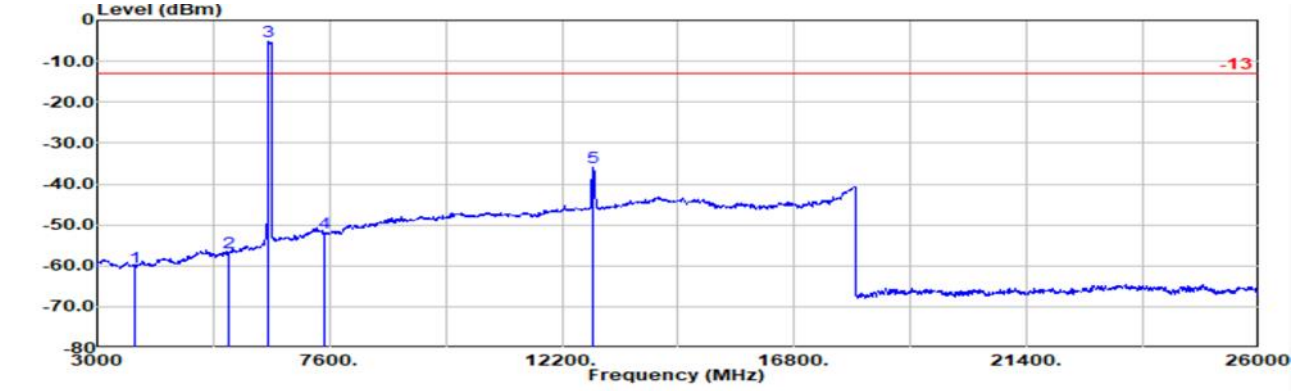
Ant.8

Part 24E Mode 8
LTE B25 20M Ch26340 1RB0 QPSK
M



Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Horizontal
Mode : LTE Band 25 20M Ch26340 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3742.00	-60.35	RMS	30.14	-29.44	0.76	-95.23	33.42	-13.00	-47.35	Horizontal
2	5610.00	-57.00	RMS	33.08	-27.66	0.34	-95.23	32.47	-13.00	-44.00	Horizontal
3	6415.50	-5.71	RMS	34.76	-26.84	0.37	-95.23	81.23	-13.00	7.29	Horizontal
4	7485.00	-51.49	RMS	36.23	-26.17	0.21	-95.23	33.47	-13.00	-38.49	Horizontal
5	12809.50	-35.32	RMS	39.81	-24.26	0.15	-95.23	44.21	-13.00	-22.32	Horizontal



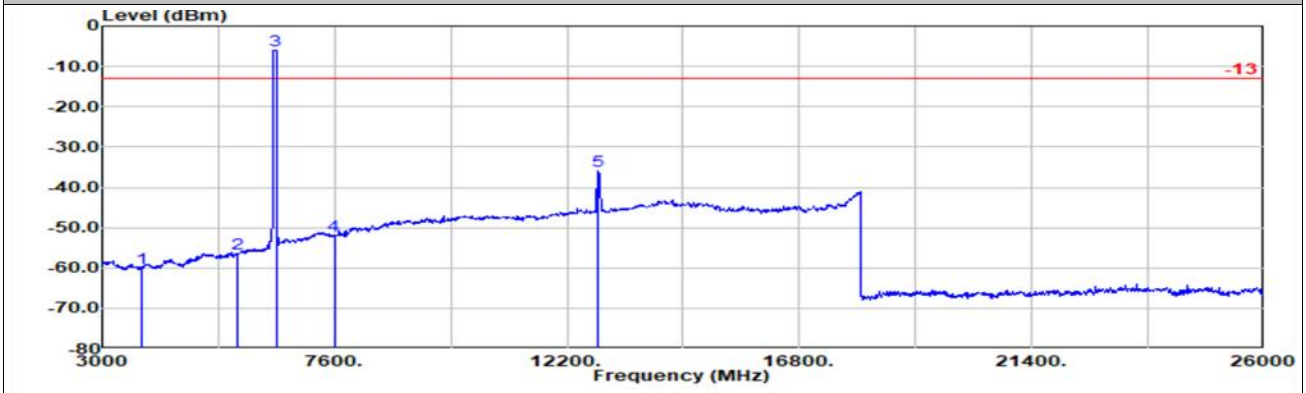
Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Vertical
Mode : LTE Band 25 20M Ch26340 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	3735.00	-60.25	RMS	30.08	-29.44	0.76	-95.23	33.58	-13.00	-47.25	Vertical
2	5610.00	-56.85	RMS	33.08	-27.66	0.34	-95.23	32.62	-13.00	-43.85	Vertical
3	6392.50	-5.17	RMS	34.69	-26.87	0.37	-95.23	81.88	-13.00	7.83	Vertical
4	7485.00	-51.89	RMS	36.23	-26.17	0.21	-95.23	33.07	-13.00	-38.89	Vertical
5	12821.00	-35.81	RMS	39.82	-24.26	0.15	-95.23	43.71	-13.00	-22.81	Vertical

Remark : # 3, 5 is Wifi signal.

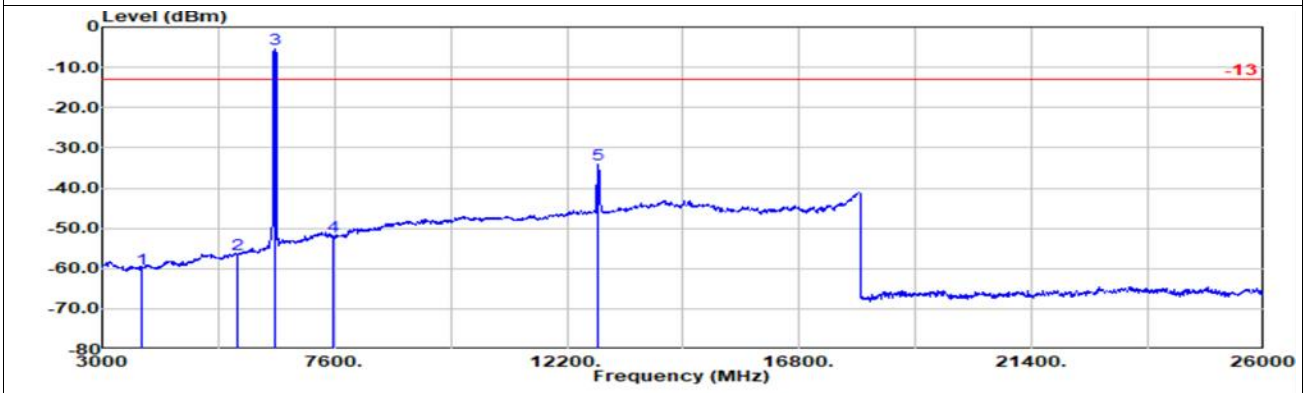
Ant.8

Part 24E Mode 8
LTE B25 20M Ch26590 1RB0 QPSK
H



Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Horizontal
Mode : LTE Band 25 20M Ch26590 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	3792.00	-60.12	RMS	30.45	-29.41	0.69	-95.23	33.38	-13.00	-47.12	Horizontal
2	5690.00	-56.35	RMS	33.60	-27.60	0.32	-95.23	32.56	-13.00	-43.35	Horizontal
3	6438.50	-6.05	RMS	34.85	-26.81	0.36	-95.23	80.78	-13.00	6.95	Horizontal
4	7590.00	-51.92	RMS	36.18	-26.18	0.13	-95.23	33.18	-13.00	-38.92	Horizontal
5	12821.00	-36.07	RMS	39.82	-24.26	0.15	-95.23	43.45	-13.00	-23.07	Horizontal



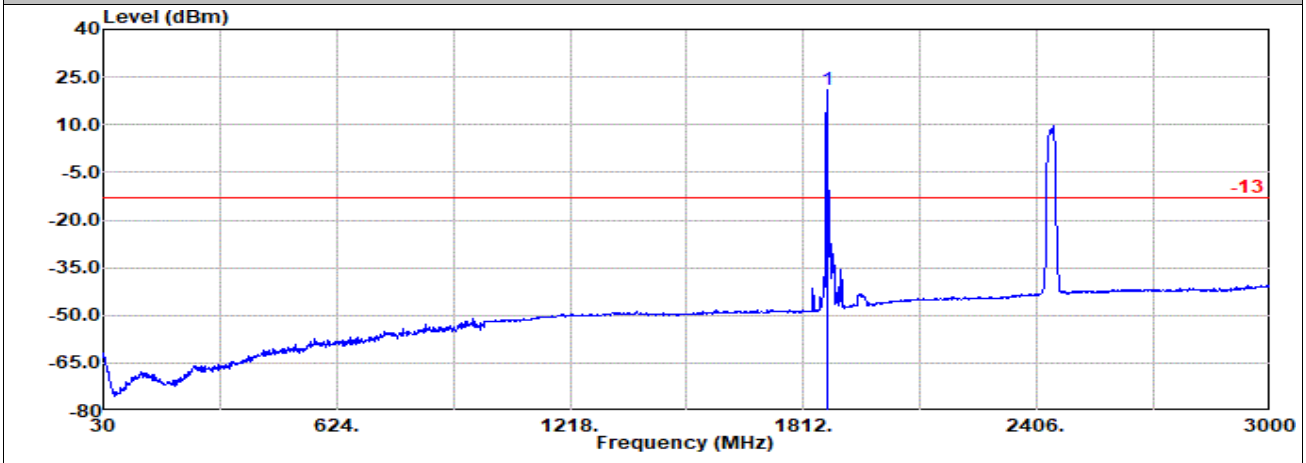
Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Vertical
Mode : LTE Band 25 20M Ch26590 1RB0 QPSK

	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	3795.00	-60.07	RMS	30.47	-29.41	0.69	-95.23	33.41	-13.00	-47.07	Vertical
2	5690.00	-56.41	RMS	33.60	-27.60	0.32	-95.23	32.50	-13.00	-43.41	Vertical
3	6415.50	-5.46	RMS	34.76	-26.84	0.37	-95.23	81.48	-13.00	7.54	Vertical
4	7585.00	-51.99	RMS	36.17	-26.18	0.13	-95.23	33.12	-13.00	-38.99	Vertical
5	12821.00	-34.21	RMS	39.82	-24.26	0.15	-95.23	45.31	-13.00	-21.21	Vertical

Remark : # 3, 5 is Wifi signal.

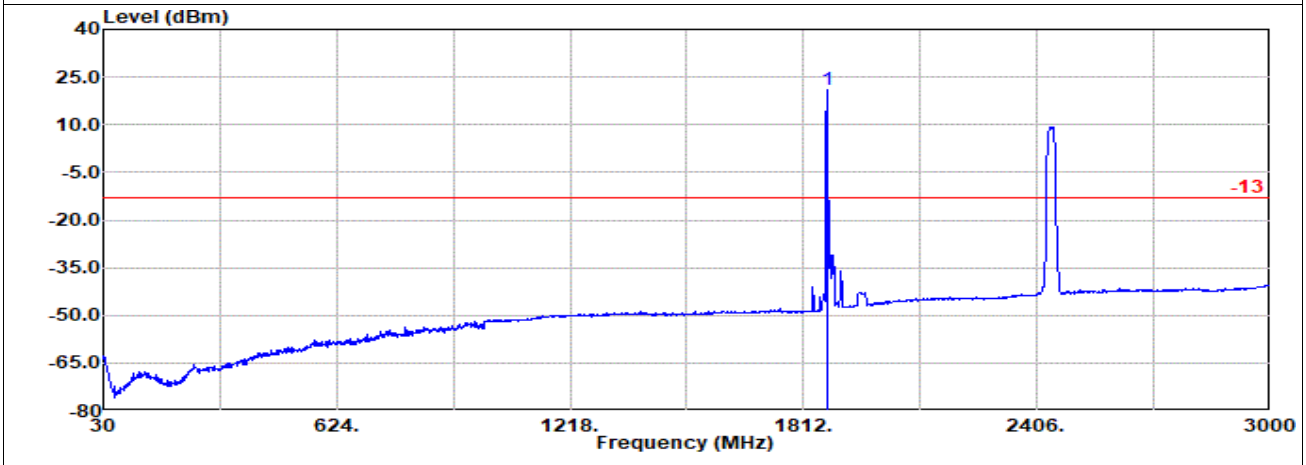
Ant.8

Part 24E Mode 6
LTE B25 20M Ch26340 1RB0 QPSK
M



Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Horizontal
Mode : LTE Band 25 20M Ch26340 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1872.00	20.83	RMS	25.52	4.99	0.00	-95.23	85.55	-13.00	33.83	Horizontal

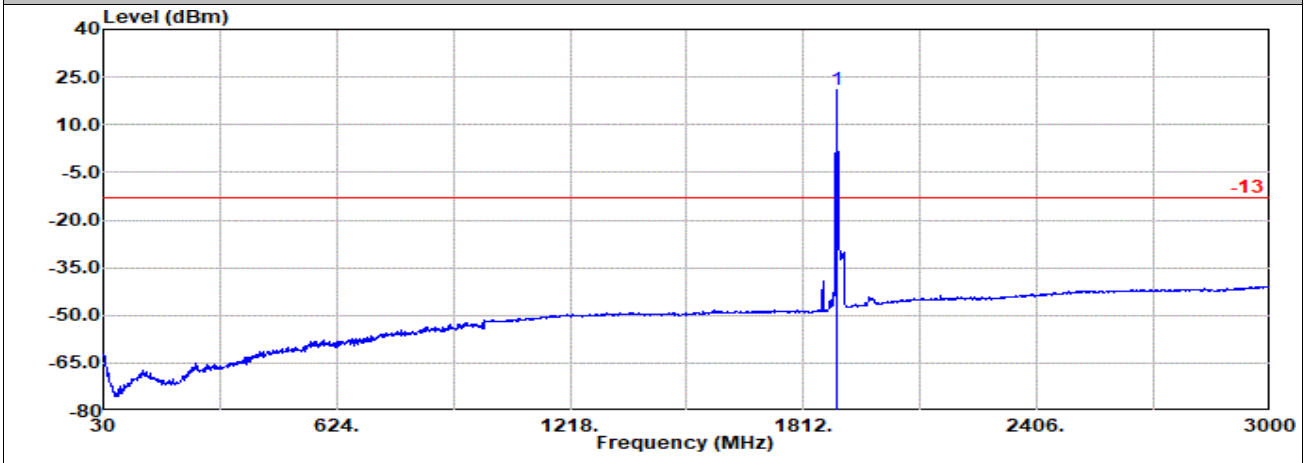


Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Vertical
Mode : LTE Band 25 20M Ch26340 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1872.00	20.85	RMS	25.52	4.99	0.00	-95.23	85.57	-13.00	33.85	Vertical

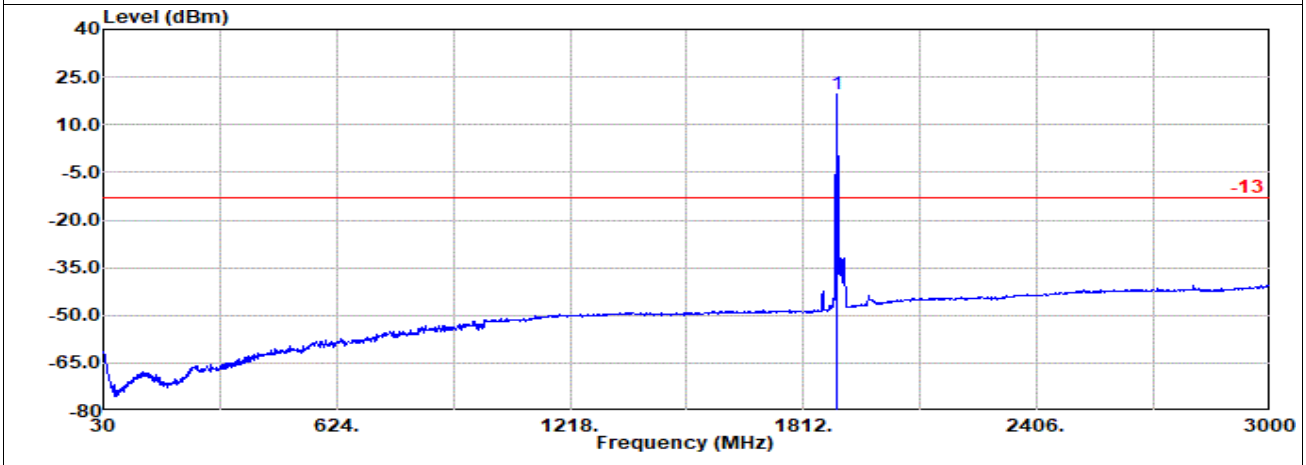
Ant.8

Part 24E Mode 7
LTE B25 20M Ch26590 1RB0 QPSK
H



Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Horizontal
Mode : LTE Band 25 20M Ch26590 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1898.00	20.82	RMS	25.78	5.03	0.00	-95.23	85.24	-13.00	33.82	Horizontal

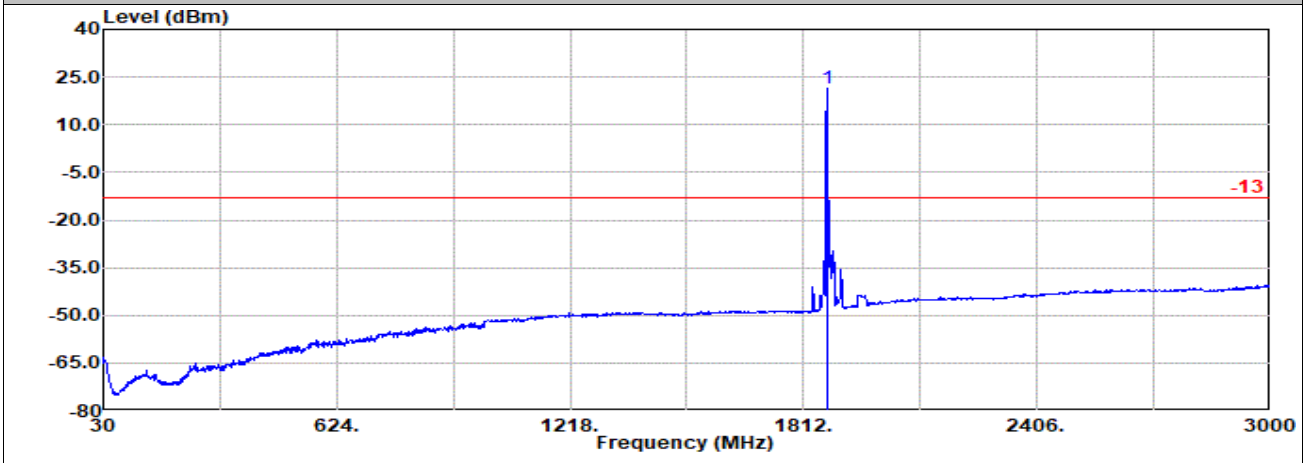


Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Vertical
Mode : LTE Band 25 20M Ch26590 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1898.00	19.58	RMS	25.78	5.03	0.00	-95.23	84.00	-13.00	32.58	Vertical

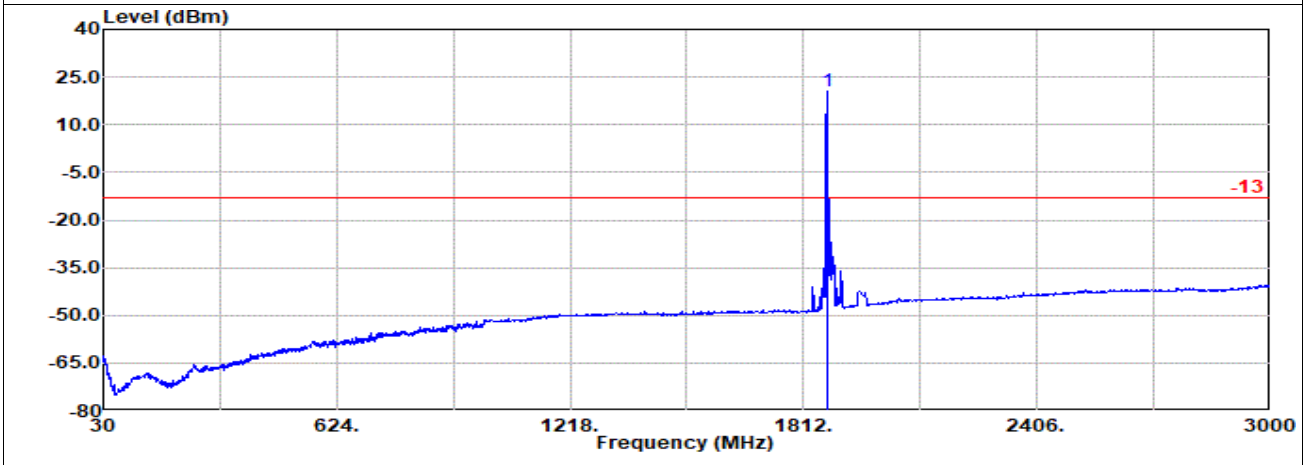
Ant.8

Part 24E Mode 8
LTE B25 20M Ch26340 1RB0 QPSK
M



Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Horizontal
Mode : LTE Band 25 20M Ch26340 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1872.00	21.25	RMS	25.52	4.99	0.00	-95.23	85.97	-13.00	34.25	Horizontal



Site : 03CH15-HY
Condition: -13 3m BBHA 9120 D_9120D-02294 Vertical
Mode : LTE Band 25 20M Ch26340 1RB0 QPSK

	Freq	Level	Detector	Ant Factor	Amp\Cbl	Filter	EIRPCF	Reading	Limit	Margin	Pol
	MHz	dBm		dB/m	dB	dB	dB	dBuV	dBm	dB	
1	1872.00	20.75	RMS	25.52	4.99	0.00	-95.23	85.47	-13.00	33.75	Vertical

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