

# **TEST REPORT**

EMC Test for SM-A266U

**APPLICANT** SAMSUNG Electronics Co., Ltd.

REPORT NO. HCT-EM-2501-FC002

**DATE OF ISSUE** January 15, 2025

> Tested by Tae-Jun Park

**Technical Manager** Jeong-Hyun Choi

3h

HCT CO., LTD.

BongJai Huh



## HCT CO.,LTD.

# TEST REPORT

FCC Certification

REPORT NO.

HCT-EM-2501-FC002

**DATE OF ISSUE** 

January 15, 2025

FCC ID.

A3LSMA266U

Applicant	SAMSUNG Electronics Co., Ltd. 129, Samsung-ro, Yeongtong-gu, Suwon-si, Gyeonggi-do, 16677, Korea
Product Name Model Name Series Model Name	Mobile Phone SM-A266U SM-A266U1, SM-S266V
Date of Test	12.27.2024 ~ 01.13.2025
Location of Test	<ul><li>✓ Permanent Testing Lab</li><li>✓ On Site Testing Lab</li><li>(Address: See clause 1.2)</li></ul>
Test Standard Used	FCC CFR 47 PART 15 Subpart B Class B ANSI C63.4-2014
Test Results	Refer to the present document
Manufacturer	SAMSUNG Electronics Co., Ltd.

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## **REVISION HISTORY**

The revision history for this test report is shown in table.

Revision No.	Date of Issue	Description
0	January 15, 2025	Initial Release

## **Notice**

## Content

The results shown in this test report only apply to the sample(s), as received, provided by the applicant, unless otherwise stated.

The test results have only been applied with the test methods required by the standard(s).

The laboratory is not accredited for the test results marked \*.

Information provided by the applicant is marked \*\*.

Test results provided by external providers are marked \*\*\*.

When confirmation of authenticity of this test report is required, please contact www.hct.co.kr

The test results in this test report are not associated with the ((KS Q) ISO/IEC 17025) accreditation by KOLAS (Korea Laboratory Accreditation Scheme) that are under the ILAC (International Laboratory Accreditation Cooperation) Mutual Recognition Agreement (MRA).

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# 1. TESTING LABORATORY

## 1.1 General Information

Organization Name	HCT CO., LTD.
Addross	74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do,
Address	Republic of Korea
Telephone	+82 31 645 6300
FAX	+82 31 645 6401

## 1.2 Location of the Test Site

The test site is located at the following address.;

Address	74, Seoicheon-ro 578beon-gil, Majang-myeon, Icheon-si, Gyeonggi-do,
Address	Republic of Korea
Telephone	+82 31 645 6300
FAX	+82 31 645 6401

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## 2. GENERAL INFORMATION

# 2.1 Description of EUT

FCC ID	A3LSMA266U
Product Name	Mobile Phone
Model Name	SM-A266U
Series Model Name a)	SM-A266U1, SM-S266V
	GSM 850/900/1800/1900, WCDMA FDD 1/2/4/5/8,
Operating	LTE FDD 1/2/3/4/5/7/12/13/17/20/25/26/28/29/30/66/67/71 TDD 38/39/41/48,
Frequency Band	5G FR1 n2/5/25/30/66/41/48/77/78,
	BT BDR/EDR/LE, WLAN a/b/g/n/ac, GNSS, NFC
	GSM 850/1 900, WCDMA B2/B4/B5
Testing	LTE B2/B4/B5/B7/B12/B13/B14/B25/B26/B29/B30/B38/B41/B48/B66/B71
Frequency Band	5G NR n2/n5/n25/n30/n41/n48/n66/n71/n77/n78
	BT BDR/EDR/LE, WLAN a/b/g/n/ac, GNSS, NFC
Manufacturer	SAMSUNG Electronics Co., Ltd.

a) Variant model

## 2.2 Power Source

During the test, the following power supply levels are utilized/provided.;

Power supply: AC 120 V, 60 Hz

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## 2.3 Tested System Details

All equipment descriptions used in the tested system (including inserted cards) are:

Device Type	ice Type Model Name		Manufacturer	
Mobile Phone	SM-A266U	SM-A266U - SAMSU		
TA <sup>a)</sup>	EP-T2510	-	DONGYANG E&P	
Data Cable	EP-DN980	-	RFTECH	
Earphone	EO-IC100	-	CRESYN	

a) Input: 100~240 V, 50~60 Hz, 0.7 A / Output: (PDO)5.0 V, 3.0 A or 9.0 V, 2.77 A (PPS)3.3~11.0 V, 2.25 A

# 2.4 Cable Description

Product Name	Port	Power Cord Shielded (Y/N)	I/O Cable Shielded (Y/N)	Length (m)
EUT -	USB Type C (Data Cable)	Υ	N/A	(P) 1.0
	USB Type C (Earphone)	N/A	N	(D) 1.3

<sup>&</sup>quot;(D)" data cable and "(P)" power cable

# 2.5 Noise Suppression Parts on Cable (I/O Cable)

Product Name	Port	Ferrite Bead (Y/N)	Location	Metal Hood (Y/N)	Location
EUT.	Data Cable (USB Type C)	N	N/A	Υ	Both End
EUT	Earphone (USB Type C)	N	N/A	Υ	EUT End

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## 2.6 Test Facility

The measurement facilities are constructed in conformance with the requirements of ANSI C63.4-2014. The Normalized site attenuations (30 MHz to 1 GHz) and Site validation (1 GHz to 18 GHz) were performed in accordance with the standard in ANSI C63.4-2014 and ANSI C63.4a-2017

Our laboratories are accredited and designated in accordance with the provisions of Radio Waves ACT and International Standard ISO/IEC 17025:2017. (National Radio Research Agency, CABID No. KR0032)

## 2.7 Calibration of Measuring Instrument

The measuring equipment, which was utilized in performing the tests documented herein, has been calibrated in accordance with the manufacturers recommendations for utilizing calibration equipment, which is traceable to recognized national standards.

Especially, all antenna for measurement is calibrated in accordance with the requirements of C63.5:2017.

## 2.8 Measurement Uncertainty

The measurement uncertainties shown below were calculated in accordance with the requirements of ANSI C63.4-2014. All measurement uncertainty values are shown with a coverage factor of k = 2 to indicate a 95 % level of confidence. The measurement data shown herein meets or exceeds the U<sub>CISPR</sub> measurement uncertainty values specified in CISPR 16-4-2 and, thus, can be compared directly to specified limits to determine compliance.

Parameter	Test Site	Expanded Uncertainty	
Conducted Emission	EMI Shield Room	1.5 dB	
		30 MHz to 1 GHz: 5.8 dB 1 GHz to 18 GHz: 4.9 dB	
Radiated Emission	3 m Semi Anechoic Chamber #1		
		18 GHz to 40 GHz: 5.9 dB	

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## 3. DESCRIPTION OF TESTING

#### 3.1 Measurement of Conducted Emission

The test procedure was in accordance with ANSI C63.4-2014, Clause 7.3

- a. The EUT was placed 0.4 meters from the conducting wall of the shielded room with EUT being connected to the power mains through a line impedance stabilization network (LISN).
  - If the EUT is connected to the PC through USB, the AC power-line adapter of the PC is directly connected to a line impedance stabilization network (LISN).
  - Other support units were connected to the power mains through another LISN. The two LISNs provide 50 Ohm/ 50uH of coupling impedance for the measuring instrument.
- b. Both conducted lines are measured in Quasi-Peak and Average mode, including the worst-case data points for each tested configuration.
- c. The frequency range from 150 kHz to 30 MHz was searched.

#### **Conducted Emission Limits**

Fraguency	Resolution	Class A		Class B	
(MHz)	Frequency (Mtz) Bandwidth (ktz)		Average (dBμV)	Quasi-Peak (dBμV)	Average (dBμV)
0.15 to 0.5	9	79	66	66 to 56*	56 to 46*
0.5 to 5	9	73	60	56	46
5 to 30	9	73	60	60	50

**NOTE.** Decreases with the logarithm of the frequency.

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#### 3.2 Measurement of Radiated Emission

The test procedure was in accordance with ANSI C63.4-2014, Clause 8.3

- a. The EUT was placed on the top of a turn table 0.8 meters above the ground at a semi-anechoic chamber. The table was rotated 360 degrees to determine the position of the highest radiation.
- b. The EUT was set 3 m away from the interference-receiving antenna, which was mounted on the top of a variable-height antenna tower.
- c. The antenna height is varied from 1 m to 4 m above the ground to determine the maximum value of the field strength. Both horizontal and vertical polarizations of the antenna are set to make the measurement.
- d. For each suspected emission, the EUT was arranged to its worst case and then the antenna was tuned to heights from 1 m to 4 m and the turn table was turned from 0 degrees to 360 degrees to find the maximum reading.
- e. The test-receiver system was set to Quasi-Peak detect function and specified bandwidth with maximum hold mode when the test frequency is below 1  $\,$  GHz.
- f. The test-receiver system was set to Peak and Average detect function and specified bandwidth with maximum hold mode when the test frequency is above 1  $\,$ GHz.
- g. Place the measurement antenna away from each area of the EUT determined to be a source of emissions at the specified measurement distance, while keeping the measurement antenna aimed at the source of emissions at each frequency of significant emissions, with polarization oriented for maximum response.

  (1 GHz to 40 GHz)

## **Radiated Emission Limits**

		Class A		Class B		
Frequency (附z)	Antenna Distance (m)	Field Strength (µV/m)	Quasi-Peak (dBμV/m)	Antenna Distance (m)	Field Strength (µV/m)	Quasi-Peak (dΒμV/m)
30 to 88	10	90	39.0	3	100	40.0
88 to 216	10	150	43.5	3	150	43.5
216 to 960	10	210	46.4	3	200	46.0
Above 960	10	300	49.5	3	500	54.0
_	Frequency Antenna Distance (州也) (m)		Class A		Class B	
			Peak (dBμV/m)	Average (dBμV/m)	Peak (dBμV/m)	Average (dBμV/m)
Above 1 000	3		80	60	74	54

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## **Frequency Range of Radiated Measurements**

An unintentional radiator, including a digital device, the spectrum shall be investigated from the lowest radio frequency signal generated or used in the device, without going below the lowest frequency for which a Radiated Emission limit is specified, up to the frequency shown in the following table

Highest frequency generated or used in the device or on which the device operates or tunes (地)	Upper frequency of measurement range (附z)		
Below 1.705	30		
1.705 to 108	1 000		
108 to 500	2 000		
500 to 1 000	5 000		
Above 1 000	5th harmonic of the highest frequency or 40 砧, whichever is lower		

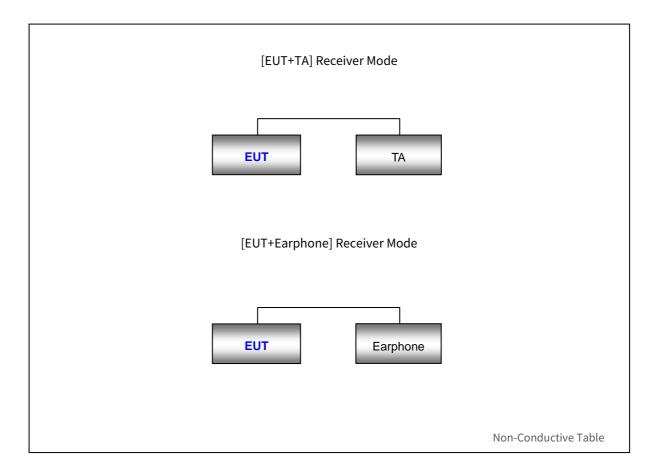
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## 3.3 Configuration of Tested System

The EUT was configured in the following manner.

At the request of the manufacturer, the configuration of the tests was arranged.



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## 4. OPERATION OF THE EUT

During preliminary tests, the following operating mode was investigated.

Receiver mode(GSM 850 Low/Middle/High ch Idle)

Receiver mode(WCDMA B5 Low/Middle/High ch Idle)

Receiver mode(LTE B5\_Low/Middle/High ch)

Receiver mode(LTE B12\_Low/Middle/High ch)

Receiver mode(LTE B13\_Low/Middle/High ch)

Receiver mode(LTE B14\_Low/Middle/High ch)

Receiver mode(LTE B26\_Low/Middle/High ch)

Receiver mode(LTE B29\_Low/Middle/High ch)

Receiver mode(LTE B71\_Low/Middle/High ch)

Receiver mode(5G NR n5\_Low/Middle/High ch)

Receiver mode(5G NR n71\_Low/Middle/High ch)

**NOTE.** The worst case is tested.

## **4.1 Conducted Emission**

**Operating Mode:** LTE B71+5G n71 Low ch Idle

 $\ensuremath{\text{NOTE.}}$  The worst case of operating mode is reported.

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## 4.2 Radiated Emission

It was final tested the following operating mode, after connecting all peripheral devices.

## **Operating Mode:**

#### Radiated Emission below 1 GHz

[EUT+TA] LTE B5+5G NR n5 Low ch Idle

LTE B5+5G NR n5 Middle ch Idle
LTE B5+5G NR n5 High ch Idle \*
LTE B12+B13 Low ch Idle \*
LTE B12+B13 Middle ch Idle
LTE B12+B13 High ch Idle
LTE B14 Low ch Idle
LTE B14 Middle ch Idle \*
LTE B14 High ch Idle
LTE B26 Low ch Idle
LTE B26 High ch Idle
LTE B26 High ch Idle
LTE B29 Low ch Idle
LTE B29 Low ch Idle

LTE B71+5G NR n71 Low ch Idle \*
LTE B71+5G NR n71 Middle ch Idle
LTE B71+5G NR n71 High ch Idle

[EUT+ Earphone] LTE B71+5G NR n71 Low ch Idle \*

#### Radiated Emission above 1 GHz

[EUT+TA] LTE B5+5G NR n5 High ch Idle

LTE B12+B13 Low ch Idle LTE B14 Middle ch Idle LTE B26 Low ch Idle LTE B29 Middle ch Idle

LTE B71+5G NR n71 Low ch Idle \*

[EUT+ Earphone] LTE B71+5G NR n71 Low ch Idle \*

#### NOTE.

- 1. Three orientations have been investigated and the worst-case orientation (x-axis: The display of EUT placed on the table is facing upwards) is reported.
- 2. Frequency bands adjacent to each other are tested as one mode.
- 3. The worst case of operating mode is reported. [\*].

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# **5. MEASURING INSTRUMENT**

	Туре	Model Name	Manufacturer	Serial Number	Cal. Cycle	Next Cal. Date (yy.mm.dd)
Cor	nducted emission					
$\boxtimes$	EMI Test Receiver	ESR7	Rohde&Schwarz	101910	1 year	2025.08.27
$\boxtimes$	LISN	ENV216	Rohde&Schwarz	102245	1 year	2025.07.17
	Radio communication analyzer	MT8821C	ANRITSU	6262192376	1 year	2025.10.15
$\boxtimes$	Radio communication analyzer	MT8000A	ANRITSU	6262208294	1 year	2025.10.14
$\boxtimes$	Antenna (for Communication)	HyperLOG7060	Aaronia	-	-	-
$\boxtimes$	Software	EMC32	Rohde & Schwarz	-	-	-
Rac	liated emission below 1	GHz				
$\boxtimes$	EMI Test Receiver	ESU40	Rohde&Schwarz	100524	1 year	2025.05.07
$\boxtimes$	Bilog Antenna	VULB9168	Schwarzbeck	255	2 year	2025.03.10
$\boxtimes$	Antenna master	MA4640-XP-ET	INNCO SYSTEM	-	N/A	-
$\boxtimes$	Antenna master controller	CO3000	INNCO SYSTEM	CO3000/870 /35990515/L	N/A	-
$\boxtimes$	Turn Table	1060	INNCO systems	-	N/A	-
$\boxtimes$	Turn Table controller	CO2000	INNCO SYSTEM	CO2000/095 /7590304/L	N/A	-
$\boxtimes$	Universal radio communication tester	CMU200	Rohde & Schwarz	107488	1 year	2025.09.24
	Wideband Radio Communication Tester	CMW500	Rohde & Schwarz	103246	1 year	2025.09.02
	Radio Communication Analyzer	MT8820C	Anritsu	6201181706	1 year	2025.03.29
	Radio communication analyzer	MT8821C	ANRITSU	6262192376	1 year	2025.10.15
$\boxtimes$	Radio communication analyzer	MT8000A	ANRITSU	6262208294	1 year	2025.10.14
$\boxtimes$	Antenna (for Communication)	HyperLOG7060	Aaronia	-	-	-
$\boxtimes$	Antenna (for Communication)	HyperLOG7060	Aaronia	-	-	-
$\boxtimes$	Software	EMC32	Rohde & Schwarz	-	-	-

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	Туре	Model Name	Manufacturer	Serial Number	Calibration Cycle	Next Calibration Date
Rac	liated emission above 1	GHz				
$\boxtimes$	EMI test receiver	ESU40	Rohde & Schwarz	100524	1 year	2025.05.07
$\boxtimes$	Antenna master	MA4640-XP-ET	INNCO SYSTEM	-	N/A	-
$\boxtimes$	Antenna master controller	CO3000	INNCO SYSTEM	CO3000/870/ 35990515/L	N/A	-
$\boxtimes$	Turn Table	1060	INNCO SYSTEM	-	N/A	-
$\boxtimes$	Turn Table controller	CO2000	INNCO SYSTEM	CO2000/095/ 7590304/L	N/A	-
$\boxtimes$	Low Noise Amplifier	TK-PA18H	TESTEK	170034-L	1 year	2025.10.14
$\boxtimes$	Low Noise Amplifier	TK-PA1840H	TESTEK	170030-L	1 year	2025.02.20
$\boxtimes$	Horn Antenna	HF907	Rohde & Schwarz	103160	1 year	2025.10.15
$\boxtimes$	Horn Antenna	BBHA 9170	Schwarzbeck	BBHA9170 #786	1 year	2025.10.30
$\boxtimes$	Universal radio communication tester	CMU200	Rohde & Schwarz	107488	1 year	2025.09.24
$\boxtimes$	Wideband Radio Communication Tester	CMW500	Rohde & Schwarz	103246	1 year	2025.09.02
$\boxtimes$	Radio communication analyzer	MT8821C	ANRITSU	6262192376	1 year	2025.10.15
$\boxtimes$	Radio communication analyzer	MT8000A	ANRITSU	6262208294	1 year	2025.10.14
$\boxtimes$	Antenna (for Communication)	HyperLOG7060	Aaronia	-	-	-
$\boxtimes$	Antenna (for Communication)	HyperLOG7060	Aaronia	-	-	-
$\boxtimes$	Software	EMC32	Rohde & Schwarz	-	-	-

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## **6. EMISSION TEST SUMMARY**

## **6.1 Conducted Emission**

## **6.1.1 Operating Condition**

The test results of conducted emission at mains ports provide the following information.;

Date of Test (yy.mm.dd)	2025.01.13.				
Tanan anahima	min. 18.8 °C	Dalatina III	min.	23.7	%
Temperature	max. 21.9 °C	Relative Humidity	max.	25.2	%
Test Site	EMI Shield Room				
Test Standard Used	FCC CFR 47 PART 15 Subpart B Class B ANSI C63.4-2014				
Frequency Range	0.15 MHz to 30 MHz				
Detector	Quasi-Peak, CISPR-Average				
Bandwidth	9 kHz (6 dB)				
Operating Mode	LTE B71+5G n71 Low ch Idle				

A conducted emission is calculated by the following equation.;

Calculation Formula: A = B + C Where

A: QuasiPeak or CAverage in dBμV

B: Receiver reading in dBμV

C: Corr. in dB (LISN Factor + Cable Loss)

Margin in dB = Limit - QuasiPeak or CAverage

L1 = Live, N = Neutral

The measurements from both Live (L1) and Neutral (N) of the LISN are combined into a single graph.

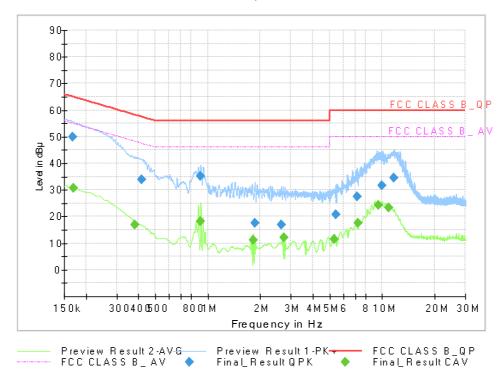
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## 6.1.2 Measurement Data

## [LTE B71+5G NR n71 Low ch Idle]

## Full Spectrum



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## [ QuasiPeak ]

Frequency [MHz]	QuasiPeak [dΒμV]	Corr. [dB]	Line	Margin [dB]	Limit [dBµV]
0.1680	49.83	9.6	L1	15.23	65.06
0.4178	33.83	9.7	L1	23.66	57.49
0.9095	35.09	9.7	L1	20.91	56.00
1.8568	17.34	9.7	N	38.66	56.00
2.6488	13.30	9.8	N	42.70	56.00
5.4005	20.81	9.9	L1	39.19	60.00
7.1645	27.37	10.0	L1	32.63	60.00
9.9163	31.56	10.1	L1	28.44	60.00
11.6555	34.68	10.2	N	25.32	60.00

[CAverage]

SAverage j					
Frequency [Mhz]	CAverage [dBμV]	Corr. [dB]	Line	Margin [dB]	Limit [dBµV]
0.1703	30.63	9.6	N	24.32	54.95
0.3795	16.99	9.6	N	31.30	48.29
0.9095	18.19	9.7	N	27.81	46.00
1.8208	11.02	9.7	L1	34.98	46.00
2.7365	12.20	9.8	L1	33.80	46.00
5.2903	11.60	9.9	L1	38.40	50.00
7.2725	17.41	10.0	L1	32.59	50.00
9.5023	24.17	10.1	L1	25.83	50.00
10.8838	23.32	10.1	N	26.68	50.00

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## 6.2 Radiated Emission Below 1 6Hz

## **6.2.1 Operating Condition**

The test results of radiated emission provide the following information:

Date of Test (yy.mm.dd)	2024.12.27 - 2025.01.02						
Tomporature	min. 19.5 °C	Dolotivo Urmidity	min.	26.5	%		
Temperature	max. 23.1 °C	Relative Humidity	max.	33.4	%		
Test Site	3 m Semi Anecho	ic Chamber #1					
Used Test Standard	FCC CFR 47 PART	15 Subpart B Class B					
	ANSI C63.4-2014						
Frequency Range	30 MHz to 1 000 MHz						
Detector	Quasi-Peak						
Bandwidth	120 kHz (6 dB)						
Measurement distance	3 m						
Antenna Height	1 m to 4 m						
Operating Mode	[EUT+Earphone]	LTE B71+5G NR n71 Low ch I	dle				
	[EUT+TA]	LTE B5+5G NR n5 High ch Idl	e				
		LTE B12+B13 Low ch Idle					
		LTE B14 Middle ch Idle					
		LTE B26 Low ch Idle					
		LTE B29 Middle ch Idle					
		LTE B71+5G NR n71 Low ch Idle					

A field strength is calculated by the following equation.;

Calculation Formula: A = B + C Where

A: Quasi Peak in dBμV/m (Field strength)

B: Receiver reading in dBμV

C: Corr. in dB (Cable loss + Antenna factor)

Margin in dB = Limit - QuasiPeak

The measurements' polarities are H and V, where H stands for horizontal and V stands for vertical.

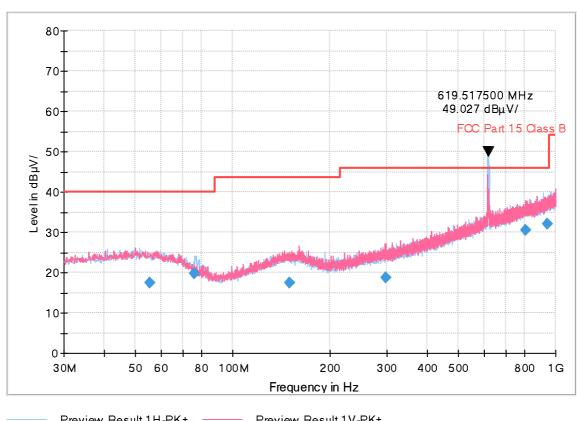
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## 6.2.2 Measurement Data

## [[EUT+Earphone] LTE B71+5G NR n71 Low Ch Idle]

## Full Spectrum



Preview Result 1H-PK+ FCC Part 15 Class B	•	Preview Result 1V-PK+ Final Result QPK
FCC Part 15 Class B		Final Result QPK

Frequency	QuasiPeak	Height	Pol.	Azimuth	Corr.	Margin	Limit
[MHz]	[dBµV/m]	[cm]	[H/V]	[deg]	[dB]	[dB]	[dBµV/m]
55.4376	17.33	125.2	V	0.0	20.0	22.67	40.00
76.2717	19.64	296.6	Н	0.0	16.6	20.36	40.00
149.7076	17.40	181.4	Н	80.0	19.7	26.10	43.50
298.9000	18.64	274.5	V	103.0	20.5	27.36	46.00
808.5735	30.46	312.2	V	265.0	30.5	15.54	46.00
941.6489	32.10	325.2	Н	297.0	32.0	13.90	46.00

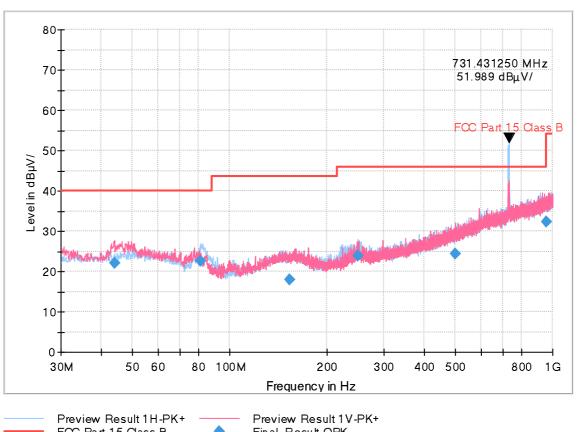
Carrier Frequency: Rx 619.5175 MHz. These are signals for fundamental frequency from the base station

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## [ [EUT+TA] LTE B12+B13 Low Ch Idle ]

#### Full Spectrum



Preview Result 1H-PK+ FCC Part 15 Class B	•	Preview Result 1V-PK+ Final Result QPK
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Frequency	QuasiPeak	Height	Pol.	Azimuth	Corr.	Margin	Limit
[MHz]	[dBµV/m]	[cm]	[H/V]	[deg]	[dB]	[dB]	[dBµV/m]
43.9283	21.97	174.6	V	82.0	19.9	18.03	40.00
81.0563	22.55	198.8	Н	193.0	15.5	17.45	40.00
153.0856	18.01	374.7	V	16.0	19.7	25.49	43.50
249.5786	23.84	180.6	Н	215.0	19.1	22.16	46.00
500.2855	24.26	400.0	V	0.0	25.4	21.74	46.00
953.7906	32.30	180.6	V	0.0	32.2	13.70	46.00

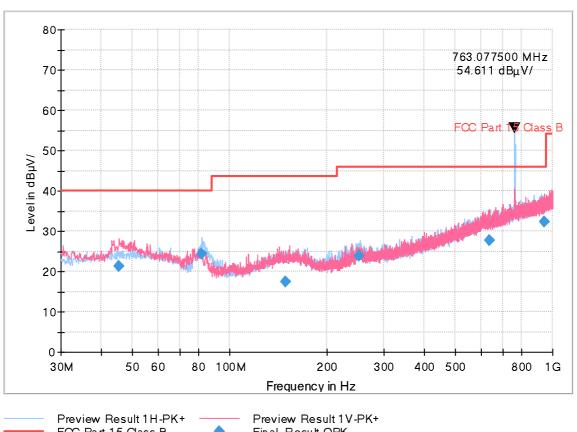
Carrier Frequency: Rx 731.4312 MHz. These are signals for fundamental frequency from the base station

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## [ [EUT+TA] LTE B14 Middle Ch Idle ]

#### Full Spectrum



Preview Result 1H-PK+	 Preview Result 1V-PK+
FCC Part 15 Class B	Final Result QPK

Frequency	QuasiPeak	Height	Pol.	Azimuth	Corr.	Margin	Limit
[MHz]	[dBµV/m]	[cm]	[H/V]	[deg]	[dB]	[dB]	[dBµV/m]
45.5098	21.35	215.0	V	240.0	20.0	18.65	40.00
82.1671	24.37	400.0	Н	196.0	15.4	15.63	40.00
148.9746	17.44	397.0	V	245.0	19.6	26.06	43.50
250.6993	23.80	174.6	Н	204.0	19.1	22.20	46.00
638.2768	27.81	212.7	V	136.0	28.0	18.19	46.00
946.0459	32.28	174.4	Н	204.0	32.1	13.72	46.00

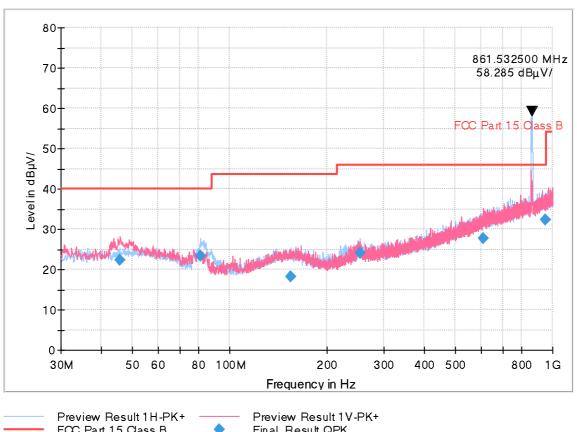
Carrier Frequency: Rx 763.0775 MHz. These are signals for fundamental frequency from the base station

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## [[EUT+TA] LTE B26 Low Ch Idle]

#### Full Spectrum



Pi	review Result 1H-PK+	 Preview Result 1V-PK+
F0	CC Part 15 Class B	Final Result QPK

Frequency	QuasiPeak	Height	Pol.	Azimuth	Corr.	Margin	Limit
[MHz]	[dBµV/m]	[cm]	[H/V]	[deg]	[dB]	[dB]	[dBµV/m]
45.6334	22.27	181.3	V	70.0	20.0	17.73	40.00
81.3755	23.40	398.6	Н	206.0	15.4	16.60	40.00
154.4481	18.08	225.2	Н	65.0	19.8	25.42	43.50
253.9984	23.99	174.8	Н	34.0	19.2	22.01	46.00
611.0337	27.62	225.1	V	314.0	27.6	18.38	46.00
952.8566	32.34	174.4	Н	314.0	32.1	13.66	46.00

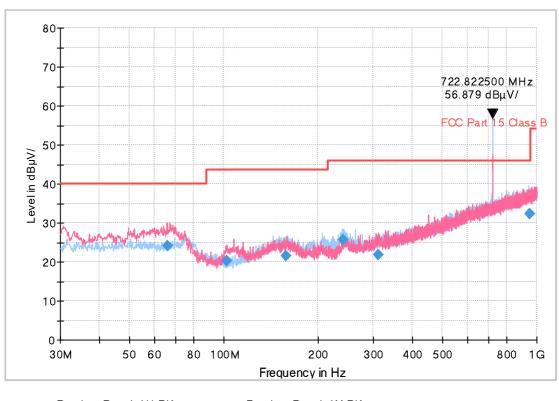
Carrier Frequency: Rx 861.5325 MHz. These are signals for fundamental frequency from the base station

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## [ [EUT+TA] LTE B29 Middle Ch Idle ]

## Full Spectrum



	view Result 1H-PK+ Part 15 Class B	•	Preview Result 1V-PK+ Final Result QPK
FC	Fail 13 Gass D		Fillal Result QFN

Frequency	QuasiPeak	Height	Pol.	Azimuth	Corr.	Margin	Limit
[MHz]	[dBµV/m]	[cm]	[H/V]	[deg]	[dB]	[dB]	[dBµV/m]
66.1355	24.15	213.2	V	108.0	18.9	15.85	40.00
101.9842	20.14	181.1	V	35.0	15.6	23.36	43.50
157.7743	21.65	197.2	Н	219.0	19.8	21.85	43.50
241.3126	25.66	174.5	Н	36.0	18.8	20.34	46.00
311.5216	21.89	174.5	V	15.0	20.8	24.11	46.00
950.1867	32.22	382.9	Н	12.0	32.1	13.78	46.00

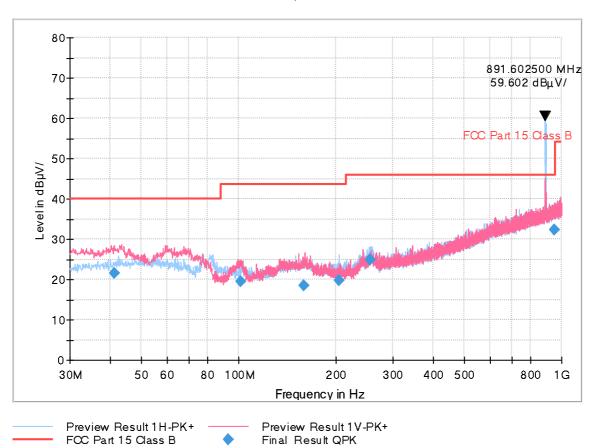
 $Carrier\ Frequency: Rx\ 722.8225\ \ \hbox{MHz}.\ These\ are\ signals\ for\ fundamental\ frequency\ from\ the\ base\ station$ 

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## [[EUT+TA] LTE B5+5G NR n5 High Ch Idle]

#### Full Spectrum



Frequency	QuasiPeak	Height	Pol.	Azimuth	Corr.	Margin	Limit
[MHz]	[dBµV/m]	[cm]	[H/V]	[deg]	[dB]	[dB]	[dBµV/m]
41.1928	21.46	211.0	V	7.0	19.7	18.54	40.00
101.4121	19.58	174.5	V	16.0	15.5	23.92	43.50
159.5970	18.39	225.1	Н	15.0	19.9	25.11	43.50
204.1086	19.72	174.6	Н	250.0	17.3	23.79	43.50
256.1394	24.83	174.7	Н	48.0	19.3	21.17	46.00
952.3602	32.27	181.7	V	292.0	32.1	13.73	46.00

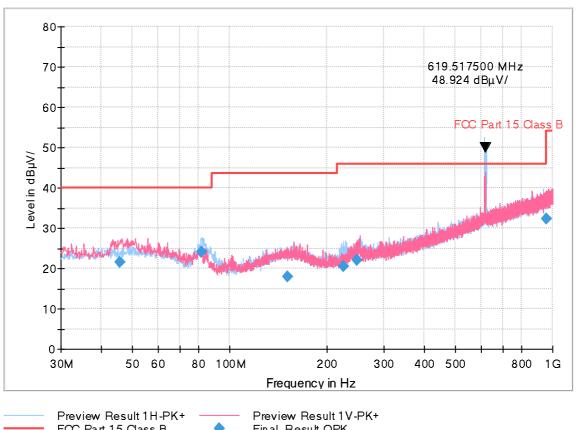
Carrier Frequency: Rx 891.6025 MHz. These are signals for fundamental frequency from the base station

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## [[EUT+TA] LTE B71+5G NR n71 Low Ch Idle]

#### Full Spectrum



Preview Result 1H-PK+ FCC Part 15 Class B	•	Preview Result 1V-PK+ Final Result QPK

Frequency	QuasiPeak	Height	Pol.	Azimuth	Corr.	Margin	Limit
[MHz]	[dBµV/m]	[cm]	[H/V]	[deg]	[dB]	[dB]	[dBµV/m]
45.7536	21.43	213.1	V	192.0	20.0	18.57	40.00
81.7539	24.10	400.0	Н	194.0	15.4	15.90	40.00
151.0878	17.86	374.4	V	288.0	19.7	25.64	43.50
224.6504	20.38	174.6	Н	249.0	18.1	25.62	46.00
247.4356	22.00	174.7	V	175.0	19.0	24.00	46.00
958.9845	32.36	400.0	Н	57.0	32.2	13.64	46.00

Carrier Frequency: Rx 619.5175 MHz. These are signals for fundamental frequency from the base station

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## 6.3 Radiated Emission Above 1 GHz

## **6.3.1 Operating Condition**

The test results of radiated emission provide the following information:

Date of Test (yy.mm.dd)	2025.01.02 - 2025.01.10								
Tomporatura	min.	18.7	°C	Polativa Humidity	min.	27.1	%		
Temperature	max.	23.8	°C	Relative Humidity	max.	33.8	%		
Test Site	3 m Semi Anechoic Chamber #1								
Used Test Standard	Jsed Test Standard FCC CFR 47 PART 15 Subpart B Class B								
	ANSI C63.4-2014								
Detector	Peak, CISPR-Average								
Bandwidth	1 MHz								
Highest Frequency	5 825 N	lHz							
Tested Frequency Range	1 GHz to	40 GHz	!						
Measurement distance	3 m								
Antenna Height	1 m to	4 m							
Operating Mode	[EUT+Earphone] LTE B71+5G NR n71 Low ch Idle								
	[EUT+TA] LTE B71+5G NR n71 Low ch Idle								

A field strength is calculated by the following equation.;

Calculation Formula: A = B + C Where

A: Peak or CAverage in dBμV/m (Field strength)

B: Receiver reading in dBμV

C: Corr. in dB (Cable loss + Antenna factor – Amplifier Gain)

Margin in dB = Limit - Peak or CAverage

The measurements' polarities are H and V, where H stands for horizontal and V stands for vertical.

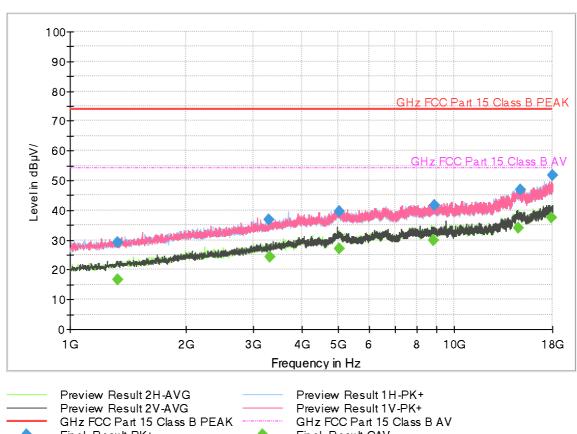
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## 6.3.2 Measurement Data

# [ 1 GHz - 18 GHz [EUT+Earphone] LTE B71+5G NR n71 Low Ch Idle ]

## Full Spectrum



Final Result PK+ Final Result CAV

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# [Peak]

						1	
Frequency	Peak	Height	Pol.	Azimuth	Corr.	Margin	Limit
[MHz]	[dBµV/m]	[cm]	[H/V]	[deg]	[dB]	[dB]	[dBµV/m]
1328.7500	29.05	174.4	Н	339.0	-29.6	44.95	74.00
3298.8050	36.66	178.3	V	300.0	-20.2	37.34	74.00
5009.7800	39.42	125.2	V	352.0	-14.6	34.58	74.00
8874.2950	41.54	117.0	Н	25.0	-9.3	32.46	74.00
14826.7350	46.87	204.9	V	276.0	0.2	27.13	74.00
17969.9204	51.67	207.5	Н	25.0	6.4	22.33	74.00

## [ CAverage ]

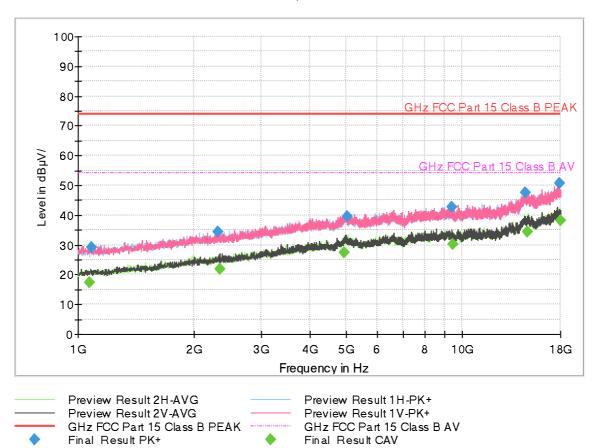
Frequency	CAverage	Height	Pol.	Azimuth	Corr.	Margin	Limit
[MHz]	[dBµV/m]	[cm]	[H/V]	[deg]	[dB]	[dB]	[dBµV/m]
1330.5250	16.77	125.2	V	222.0	-29.6	37.23	54.00
3316.9450	24.21	174.4	Н	0.0	-20.1	29.79	54.00
5019.6450	26.97	106.0	V	75.0	-14.5	27.03	54.00
8819.3350	29.81	176.8	Н	194.0	-9.3	24.19	54.00
14635.0600	34.03	106.7	Н	337.0	0.1	19.97	54.00
17862.9200	37.51	125.2	Н	242.0	5.8	16.49	54.00

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## [ 1 GHz - 18 GHz [EUT+TA] LTE B71+5G NR n71 Low Ch Idle ]

#### Full Spectrum



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# [Peak]

Frequency	Peak	Height	Pol.	Azimuth	Corr.	Margin	Limit
[MHz]	[dBµV/m]	[cm]	[H/V]	[deg]	[dB]	[dB]	[dBµV/m]
1084.5200	29.29	102.3	Н	2.0	-31.0	44.71	74.00
2313.3650	34.28	124.9	Н	25.0	-24.4	39.72	74.00
5007.0350	39.59	225.1	V	88.0	-14.6	34.41	74.00
9394.3650	42.60	225.0	V	52.0	-8.9	31.40	74.00
14568.5950	47.58	125.0	V	317.0	0.1	26.42	74.00
17909.9350	50.74	109.0	Н	195.0	6.1	23.26	74.00

[ CAverage ]

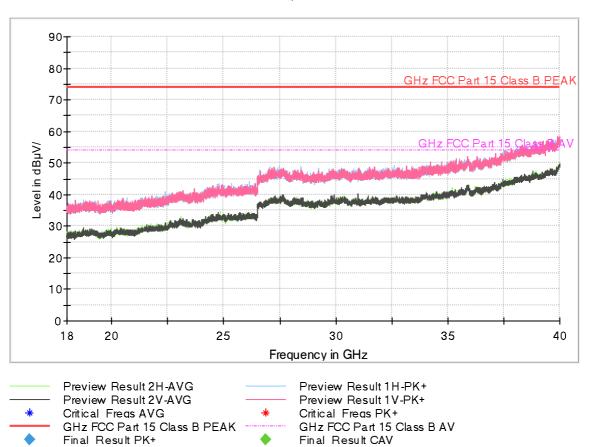
Frequency	CAverage	Height	Pol.	Azimuth	Corr.	Margin	Limit
[MHz]	[dBµV/m]	[cm]	[H/V]	[deg]	[dB]	[dB]	[dBµV/m]
1069.0150	17.25	177.7	Н	209.0	-31.0	36.75	54.00
2340.7200	22.05	100.0	Н	92.0	-24.3	31.95	54.00
4929.5350	27.29	109.0	V	31.0	-14.8	26.71	54.00
9423.7350	30.16	102.4	Н	49.0	-8.9	23.84	54.00
14759.0800	34.42	100.0	Н	246.0	0.2	19.58	54.00
17965.5243	38.33	177.4	V	21.0	6.4	15.67	54.00

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## [ 18 GHz - 40 GHz [EUT+Earphone] LTE B71+5G NR n71 Low Ch Idle ]

#### Full Spectrum

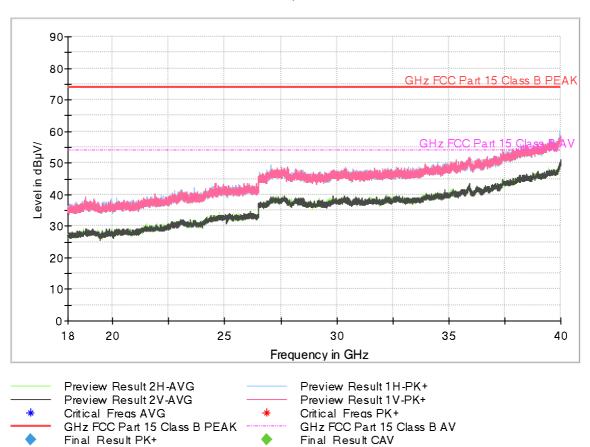


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## [ 18 GHz - 40 GHz [EUT+TA] LTE B71+5G NR n71 Low Ch Idle ]

#### Full Spectrum



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## **APPENDIX A. TEST SETUP PHOTO**

Please refer to Appendix. A and test setup photo file no. as follows;

File No.	Date of Issue	Description
HCT-EM-2501-FC002-P	January 15, 2025	Initial Release

End of report

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