



TESTING LABORATORY  
CERTIFICATE#4323.01



## FCC PART 15.249

### TEST REPORT

For

## Hangzhou Meiri Technology Co., Ltd.

Room 604-605, Building 1, No. 768 Jianghong Road, Changhe street, Binjiang  
District, Hangzhou, Zhejiang, China

**FCC ID: 2AG7C-BELL5**

<b>Report Type:</b> Original Report	<b>Product Type:</b> Wireless DoorBell
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<b>Report Number:</b>	RSHA210513002-00A
<b>Report Date:</b>	2021-08-06
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## GENERAL INFORMATION

### Product Description for Equipment under Test (EUT)

Applicant:	Hangzhou Meari Technology Co., Ltd.
Tested Model:	Bell 5S
Series Model:	Bell 5X, Bell 5T, Bell 8S, Bell 8X, Bell 8T, Bell 9S, Bell 9T, Bell 12S, Bell 12T
Model Difference:	See Declaration letter
Product Type:	Wireless DoorBell
Power Supply:	DC 5V from Adapter or AC/DC 12-24V
RF Function:	SRD
Field strength of fundamental	90.93dB $\mu$ V /m@3m
Operating Band/Frequency:	915MHz
Channel Number:	1
Antenna Type:	FPC Antenna
*Maximum Antenna Gain:	2dBi

#### Adapter-1 Information:

Model: GTA92-0501000US

Input: AC100-240V~50/60Hz, 0.3A

Output: 5.0V, 1.0A, 5.0W

#### Adapter-2 Information:

Model: TPA-46B050100UU

Input: AC100-240V~50/60Hz, 0.2A

Output: 5.0V, 1000mA

\*Note: The maximum antenna gain was declared by the applicant.

All measurement and test data in this report was gathered from production sample serial number: RSHA210513002-1 (Assigned by BACL, Kunshan). The EUT was received on 2021-05-13.

### Objective

This type approval report is prepared on behalf of Hangzhou Meari Technology Co., Ltd. in accordance with Part 2-Subpart J, and Part 15-Subparts A and C of the Federal Communication Commission rules.

The tests were performed in order to determine compliance with FCC Part 15, Subpart C, and section 15.203, 15.205, 15.207, 15.209, 15.215 and 15.249 rules.

### Related Submittal(s)/Grant(s)

FCC Part 15.247 DTS submissions with FCC ID: 2AG7C-BELL5.

## Test Methodology

All measurements contained in this report were conducted with ANSI C63.10-2013, American National Standard of Procedures for Compliance Testing of Unlicensed Wireless Devices.

All radiated and conducted emissions measurement was performed at Bay Area Compliance Lab Corp. (Kunshan). The radiated testing was performed at an antenna-to-EUT distance of 3 meters.

## Measurement Uncertainty

Item		Uncertainty
AC Power Lines Conducted Emissions		3.19 dB
RF conducted test with spectrum		0.9dB
RF Output Power with Power meter		0.5dB
Radiated emission	30MHz~1GHz	6.11dB
	1GHz~6GHz	4.45dB
	6GHz~18GHz	5.23dB
	18GHz~40GHz	5.65dB
Occupied Bandwidth		0.5kHz
Temperature		1.0°C
Humidity		6%

## Test Facility

The test site used by Bay Area Compliance Laboratories Corp. (Kunshan) to collect test data is located on the No.248 Chenghu Road, Kunshan, Jiangsu province, China.

Bay Area Compliance Laboratories Corp. (Kunshan) Lab is accredited to ISO/IEC 17025 by A2LA (Lab code: 4323.01) and the FCC designation No. CN1185 under the FCC KDB 974614 D01 and CAB identifier CN0004 under the ISSED requirement. The facility also complies with the radiated and AC line conducted test site criteria set forth in ANSI C63.4-2014.

## SYSTEM TEST CONFIGURATION

### Justification

Channel list:

Channel	Frequency (MHz)
1	915

### EUT Exercise Software

No software was used during the test.

### Support Equipment List and Details

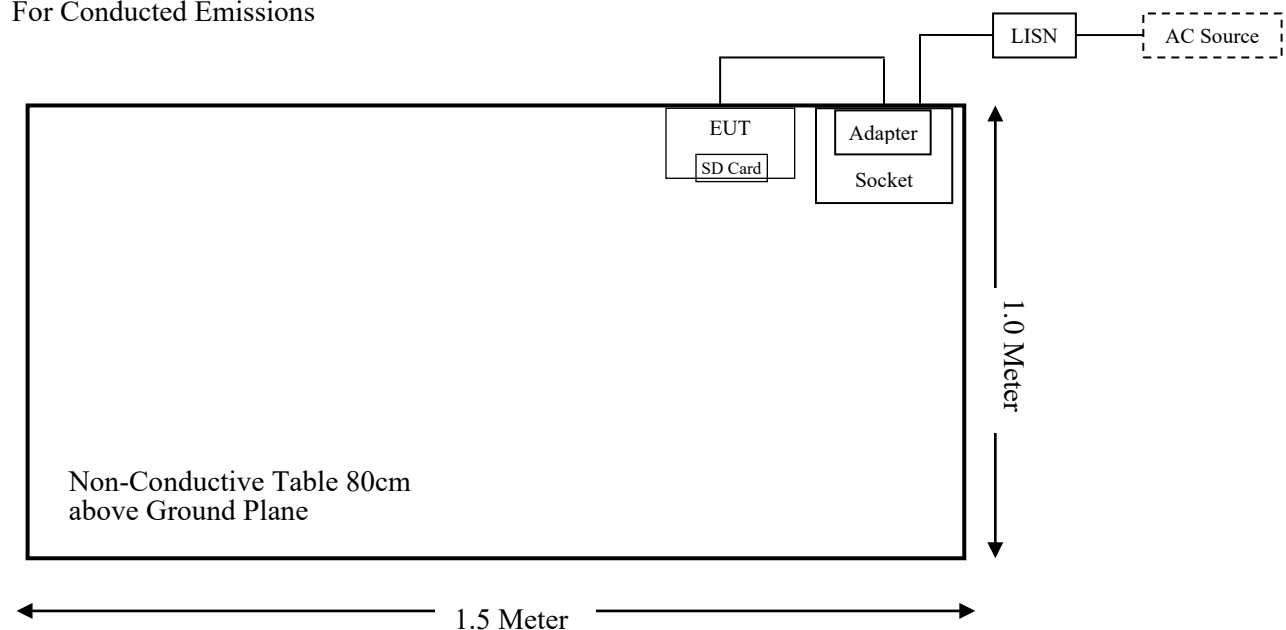
Manufacturer	Description	Model	Serial Number
ZHAOXIN	DC Power Supply	RXN-605D	DC002
SanDisk	SD Card	32G	72810VCP912S

### External I/O Cable

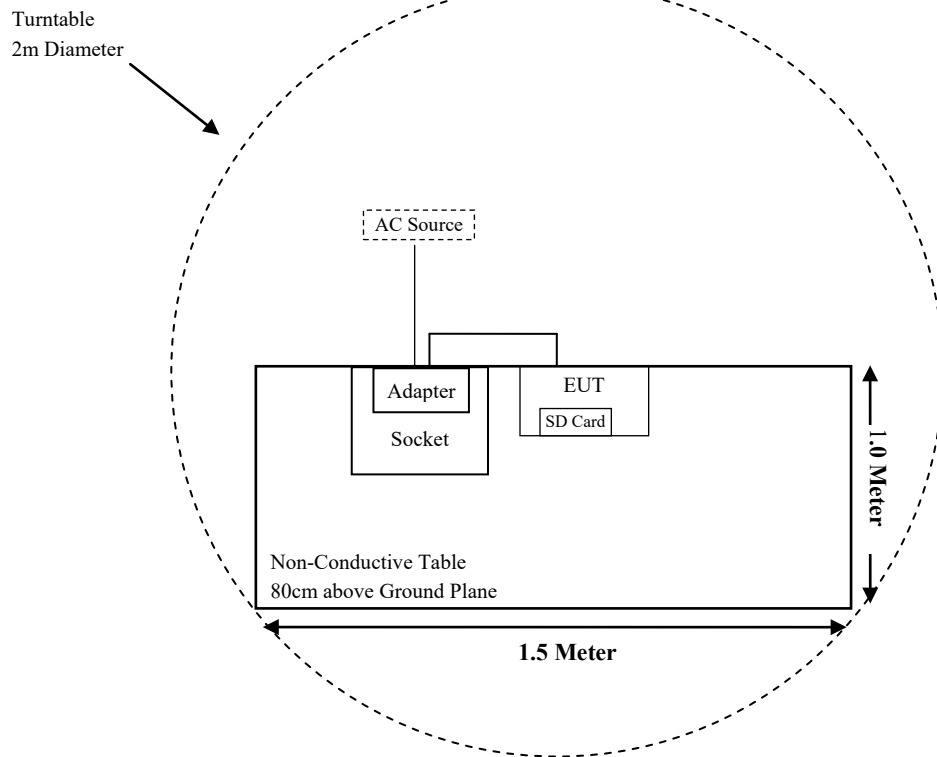
Cable Description	Length (m)	From Port	To
Power Cable 1	2.0	EUT	Adapter
Power Cable 2	1.0	Socket	LISN/AC Source
Power Cable 3	1.0	EUT	DC Source

### Block Diagram of Test Setup

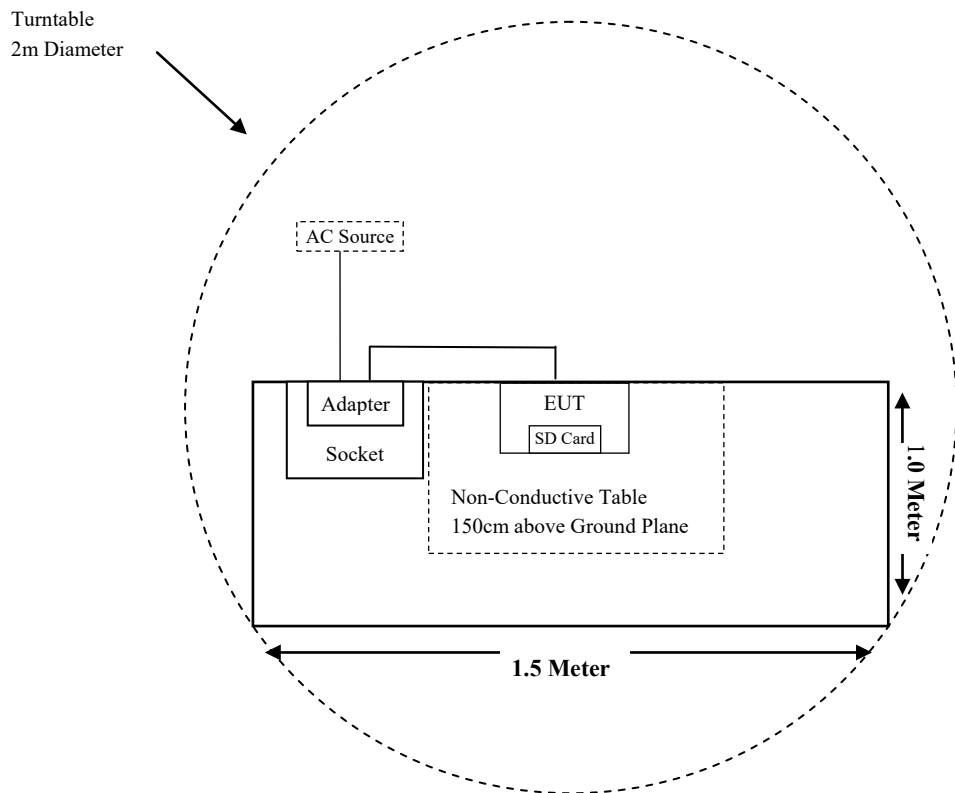
*Powered by adapter*  
For Conducted Emissions



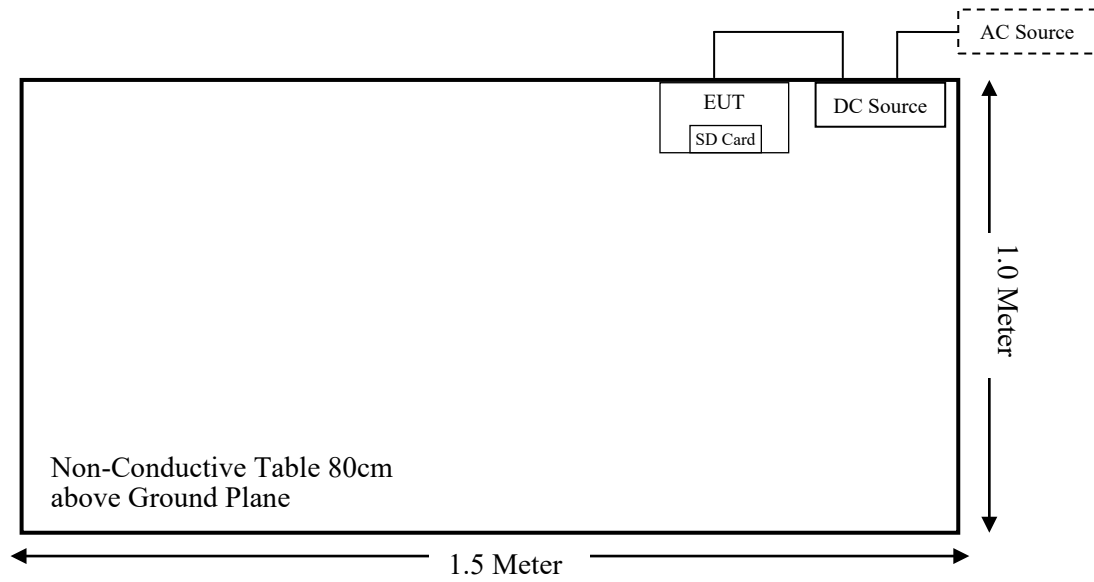
For Radiated Emissions(Below 1GHz):



For Radiated Emissions(Above 1GHz):

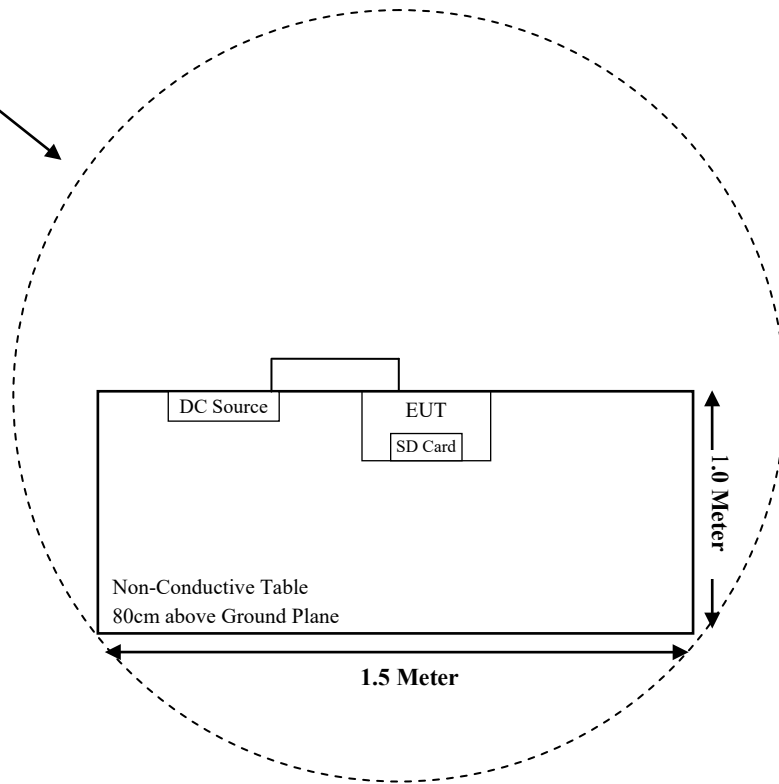


*Powered by DC source*  
For Conducted Emissions:



For Radiated Emissions(Below 1GHz):

Turntable  
2m Diameter





**SUMMARY OF TEST RESULTS**

FCC Rules	Description of Test	Result
§15.203	Antenna Requirement	Compliant
§15.207(a)	AC Line Conducted Emissions	Compliant
15.205, §15.209, §15.249	Radiated Emissions& Out of Band Emission	Compliant
§15.215 (c)	20 dB Bandwidth	Compliant

## TEST EQUIPMENT LIST

Manufacturer	Description	Model	Serial Number	Calibration Date	Calibration Due Date
<b>Radiated Emission Test (Chamber 1#)</b>					
Rohde & Schwarz	EMI Test Receiver	ESCI	100195	2020-11-27	2021-11-26
Rohde & Schwarz	Signal Analyzer	FSV40	101116	2020-07-28	2021-07-27
Sunol Sciences	Broadband Antenna	JB3	A090314-2	2020-01-07	2023-01-06
Sonoma Instrument	Pre-amplifier	310N	171205	2020-08-14	2021-08-13
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-TRONICS	Band Reject Filter	BRC50722	G013	2020-08-05	2021-08-04
MICRO-COAX	Coaxial Cable	Cable-8	008	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-9	009	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-10	010	2020-08-15	2021-08-14
<b>Radiated Emission Test (Chamber 2#)</b>					
Rohde & Schwarz	EMI Test Receiver	ESU40	100207	2021-04-01	2022-03-31
ETS-LINDGREN	Horn Antenna	3115	9311-4159	2020-07-15	2023-07-14
A.H.Systems, inc	Amplifier	PAM-0118P	512	2020-08-14	2021-08-13
MICRO-TRONICS	Band Reject Filter	BRC50722	G013	2020-08-05	2021-08-04
Rohde & Schwarz	Auto test Software	EMC32	100361	N/A	N/A
MICRO-COAX	Coaxial Cable	Cable-6	006	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-11	011	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-12	012	2020-08-15	2021-08-14
MICRO-COAX	Coaxial Cable	Cable-13	013	2020-08-15	2021-08-14
<b>Conducted Emission Test</b>					
Rohde & Schwarz	EMI Test Receiver	ESR	1316.3003K03-101746-zn	2020-08-05	2021-08-04
Rohde & Schwarz	EMI Test Receiver	ESR	1316.3003K03-101746-zn	2021-08-05	2022-08-04
Rohde & Schwarz	LISN	ENV216	101115	2020-11-27	2021-11-26
Audix	Test Software	e3	V9	N/A	N/A
Rohde & Schwarz	Pulse limiter	ESH3-Z2	100552	2020-08-10	2021-08-09
MICRO-COAX	Coaxial Cable	Cable-15	015	2020-08-15	2021-08-14

\* **Statement of Traceability:** Bay Area Compliance Laboratories Corp. (Kunshan) attests that all calibrations have been performed in accordance to requirements that traceable to National Primary Standards and International System of Units (SI).

## **FCC§15.203 - ANTENNA REQUIREMENT**

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### **Applicable Standard**

For intentional device, according to §15.203, an intentional radiator shall be designed to ensure that no antenna other than that furnished by the responsible party shall be used.

### **Antenna Connector Construction**

The EUT has a FPC Antenna for SRD, which was permanently attached to the EUT, antenna gain is 2dBi, fulfill the requirement of this section, please refer to the EUT photos.

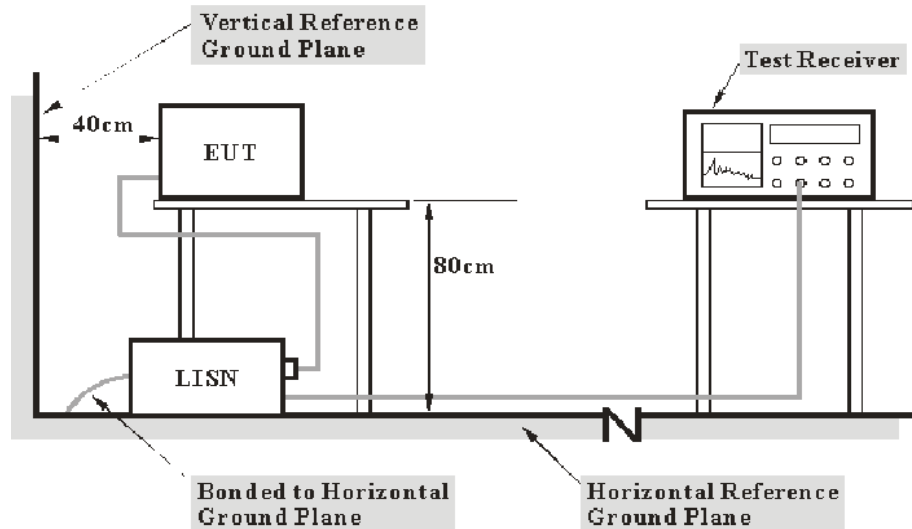
**Result:** Compliant.

## FCC §15.207 (a) – AC LINE CONDUCTED EMISSIONS

### Applicable Standard

FCC §15.207(a)

### EUT Setup



Note: 1. Support units were connected to second LISN.  
 2. Both of LISNs (AMN) 80 cm from EUT and at the least 80 cm from other units and other metal planes support units.

The measurement procedure of EUT setup is according with ANSI C63.10-2013. The related limit was specified in FCC Part 15.207.

The spacing between the peripherals was 10 cm.

### EMI Test Receiver Setup

The EMI test receiver was set to investigate the spectrum from 150 kHz to 30 MHz.

During the conducted emission test, the EMI test receiver was set with the following configurations:

Frequency Range	IF B/W
150 kHz – 30 MHz	9 kHz

## Test Procedure

ANSI C63.10-2013 clause 6.2

During the conducted emission test, the adapter was connected to the outlet of the LISN.

Maximizing procedure was performed on the six (6) highest emissions of the EUT.

All final data was recorded in the peak and average detection mode.

## Factor & Over Limit Calculation

The Factor is calculated by adding LISN VDF (Voltage Division Factor), Cable Loss and Transient Limiter Attenuation. The basic equation is as follows:

$$\text{Factor (dB)} = \text{LISN VDF (dB)} + \text{Cable Loss (dB)} + \text{Transient Limiter Attenuation (dB)}$$

The “**Over Limit**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, an Over Limit of 7 dB means the emission is 7 dB above the limit. The equation for Over Limit calculation is as follows:

$$\text{Over Limit (dB)} = \text{Read level (dB}\mu\text{V)} + \text{Factor (dB)} - \text{Limit (dB}\mu\text{V)}$$

## Test Results Summary

According to the recorded data in following table, the EUT complied with the FCC Part 15.207.

## Test Data

### Environmental Conditions

Temperature:	25.3 °C
Relative Humidity:	50 %
ATM Pressure:	101.5 kPa

*The testing was performed by Stone Zhang from 2021-05-31 to 2021-08-06.*

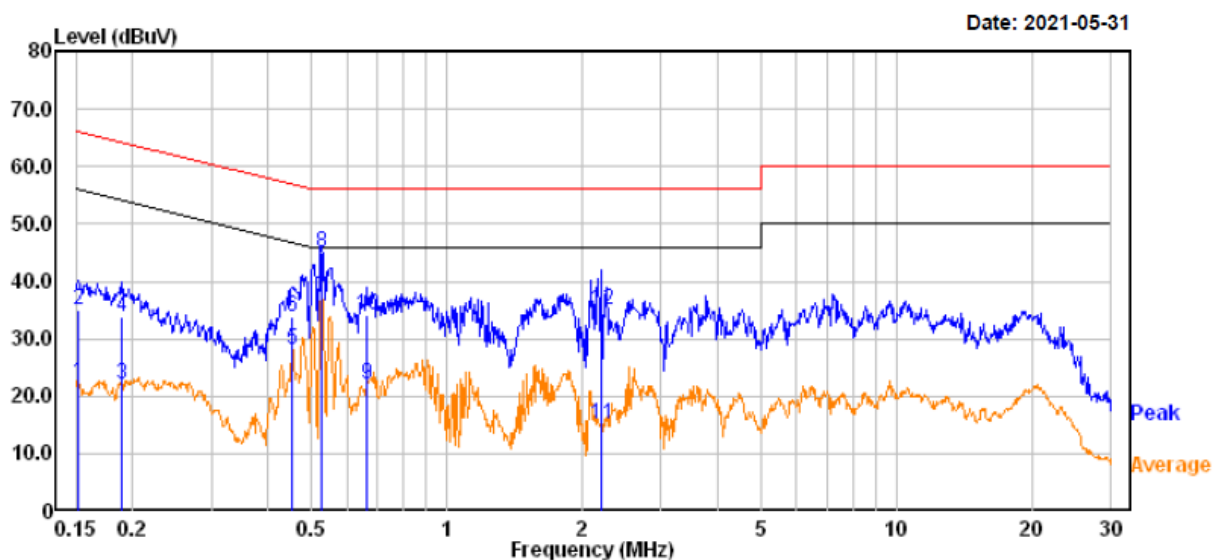
**Test Result:** Compliant.

Powered by adapter:

Model: Bell 5S

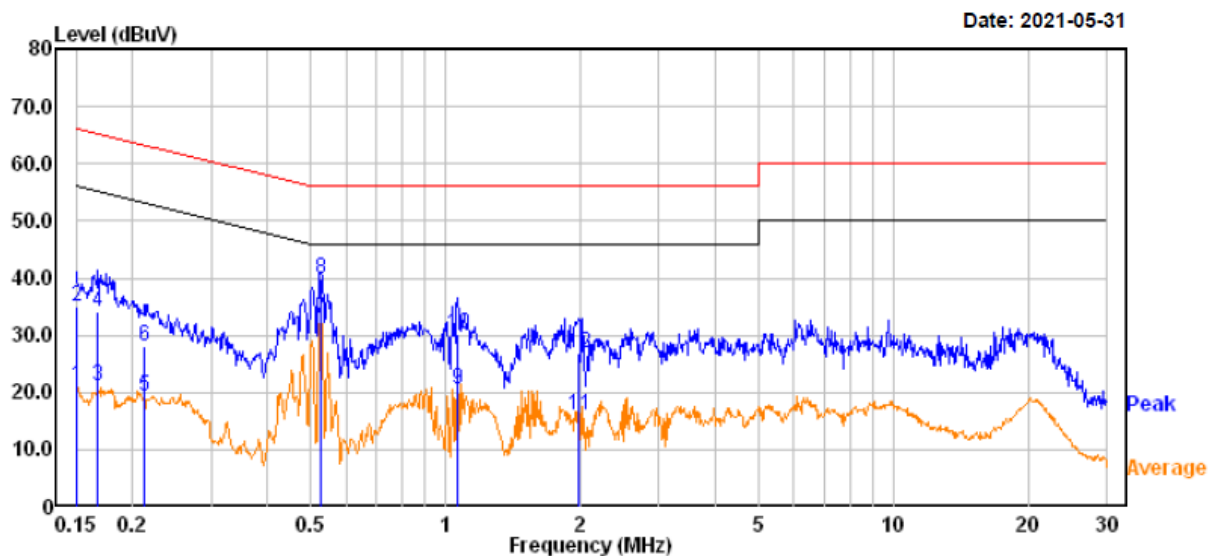
For Adapter-1:

AC 120V/60 Hz, Line



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.152	2.39	19.82	22.21	55.92	-33.71	Average
2	0.152	15.10	19.82	34.92	65.92	-31.00	QP
3	0.189	2.15	19.82	21.97	54.10	-32.13	Average
4	0.189	14.00	19.82	33.82	64.10	-30.28	QP
5	0.454	8.20	19.75	27.95	46.81	-18.86	Average
6	0.454	14.10	19.75	33.85	56.81	-22.96	QP
7	0.527	17.51	19.75	37.26	46.00	-8.74	Average
8	0.527	25.11	19.75	44.86	56.00	-11.14	QP
9	0.666	2.19	19.75	21.94	46.00	-24.06	Average
10	0.666	14.30	19.75	34.05	56.00	-21.95	QP
11	2.213	-4.62	19.67	15.05	46.00	-30.95	Average
12	2.213	15.20	19.67	34.87	56.00	-21.13	QP

## AC 120V/60 Hz, Neutral



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.150	1.34	19.82	21.16	56.00	-34.84	Average
2	0.150	15.10	19.82	34.92	66.00	-31.08	QP
3	0.167	1.45	19.83	21.28	55.09	-33.81	Average
4	0.167	14.20	19.83	34.03	65.09	-31.06	QP
5	0.213	-0.37	19.82	19.45	53.10	-33.65	Average
6	0.213	8.40	19.82	28.22	63.10	-34.88	QP
7	0.527	13.01	19.75	32.76	46.00	-13.24	Average
8	0.527	20.11	19.75	39.86	56.00	-16.14	QP
9	1.064	0.69	19.82	20.51	46.00	-25.49	Average
10	1.064	10.40	19.82	30.22	56.00	-25.78	QP
11	1.983	-3.78	19.83	16.05	46.00	-29.95	Average
12	1.983	7.10	19.83	26.93	56.00	-29.07	QP

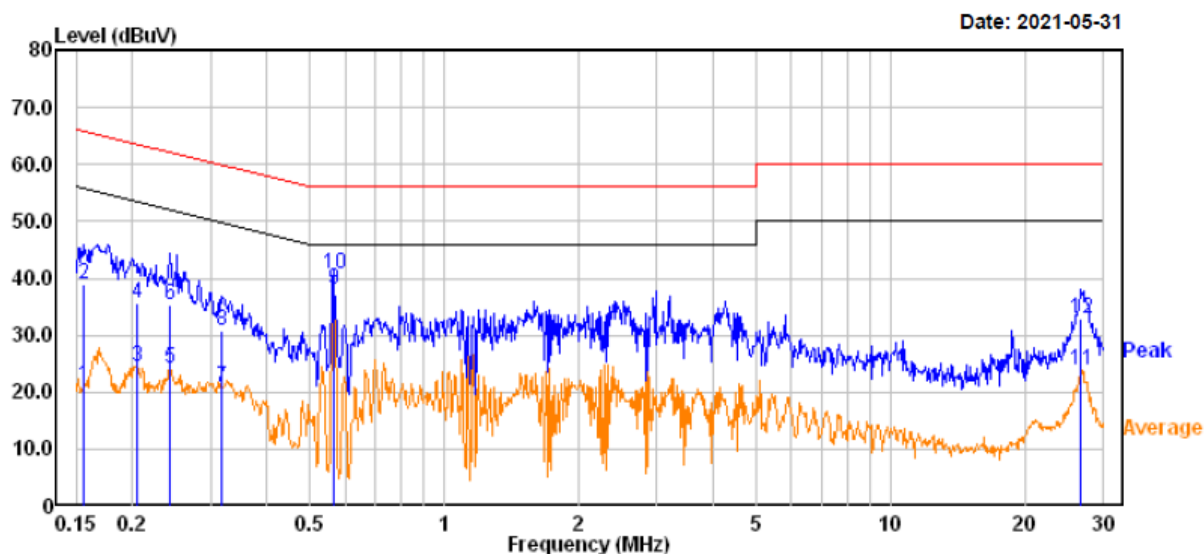
**Note:**

1) Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB)

2) Over Limit (dB) = Read level (dBμV) + Factor (dB) - Limit (dBμV)

For Adapter-2

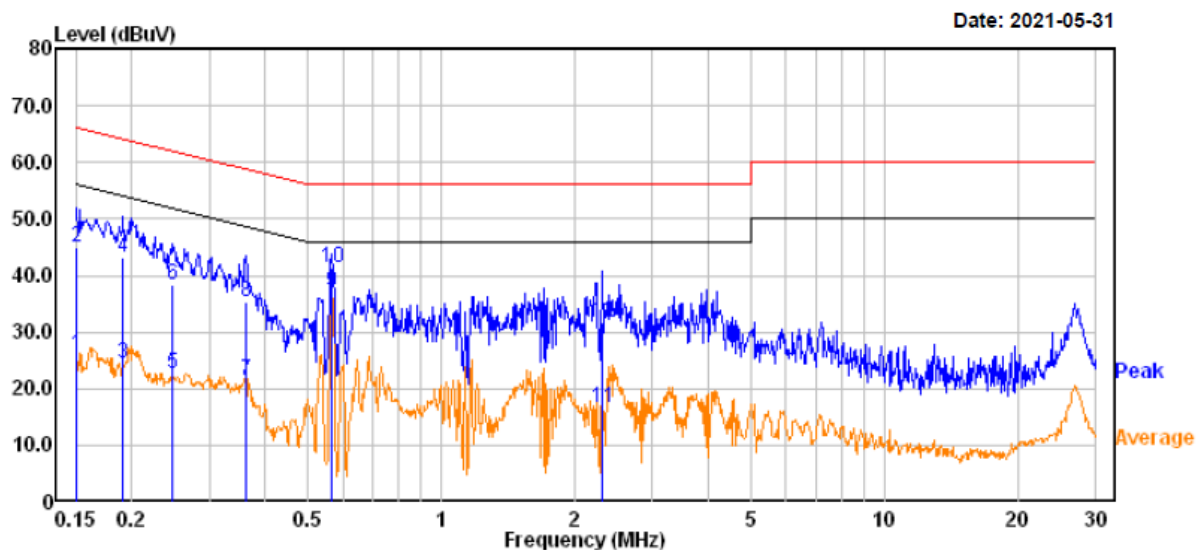
AC 120V/60 Hz, Line



	Freq	Read Level	Factor	Level	Limit Line	Over Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.156	1.20	19.82	21.02	55.67	-34.65	Average
2	0.156	19.20	19.82	39.02	65.67	-26.65	QP
3	0.204	4.70	19.82	24.52	53.43	-28.91	Average
4	0.204	15.80	19.82	35.62	63.43	-27.81	QP
5	0.243	4.46	19.82	24.28	51.98	-27.70	Average
6	0.243	15.60	19.82	35.42	61.98	-26.56	QP
7	0.318	1.03	19.82	20.85	49.75	-28.90	Average
8	0.318	11.00	19.82	30.82	59.75	-28.93	QP
9	0.565	18.30	19.75	38.05	46.00	-7.95	Average
10	0.565	20.90	19.75	40.65	56.00	-15.35	QP
11	26.751	4.25	19.72	23.97	50.00	-26.03	Average
12	26.751	13.10	19.72	32.82	60.00	-27.18	QP



## AC 120V/60 Hz, Neutral



		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.151	6.22	19.82	26.04	55.96	-29.92	Average
2	0.151	25.20	19.82	45.02	65.96	-20.94	QP
3	0.192	4.60	19.82	24.42	53.97	-29.55	Average
4	0.192	23.40	19.82	43.22	63.97	-20.75	QP
5	0.248	2.70	19.82	22.52	51.82	-29.30	Average
6	0.248	18.50	19.82	38.32	61.82	-23.50	QP
7	0.362	1.55	19.79	21.34	48.67	-27.33	Average
8	0.362	15.60	19.79	35.39	58.67	-23.28	QP
9	0.568	17.50	19.75	37.25	46.00	-8.75	Average
10	0.568	21.70	19.75	41.45	56.00	-14.55	QP
11	2.315	-2.93	19.59	16.66	46.00	-29.34	Average
12	2.315	12.01	19.59	31.60	56.00	-24.40	QP

**Note:**

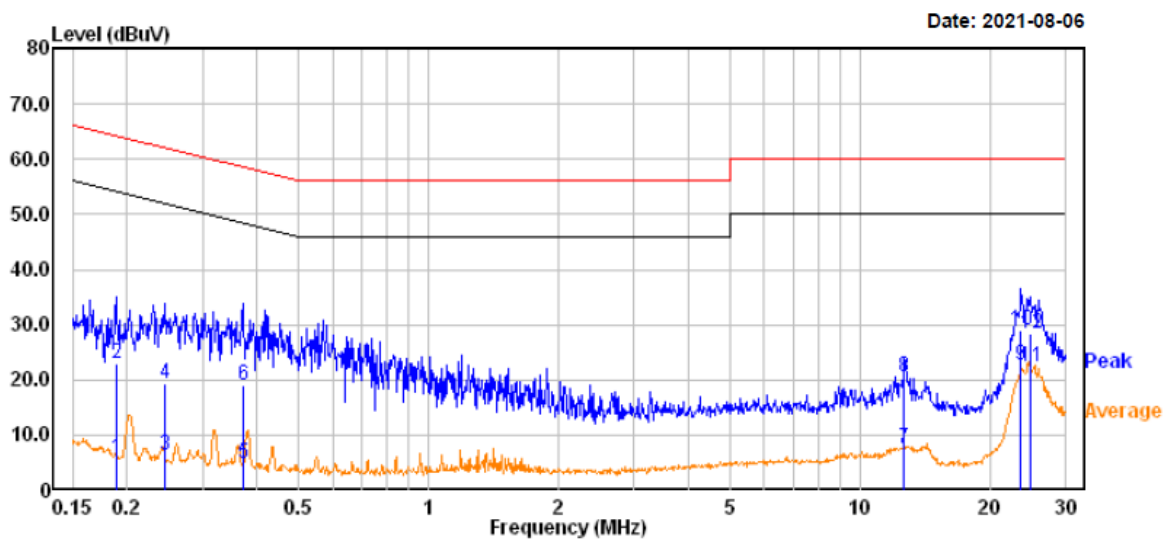
1) Factor (dB) = LISN VDF (dB) + Cable Loss (dB) + Transient Limiter Attenuation (dB)

2) Over Limit (dB) = Read level (dBμV) + Factor (dB) - Limit (dBμV)

Powered by DC source:

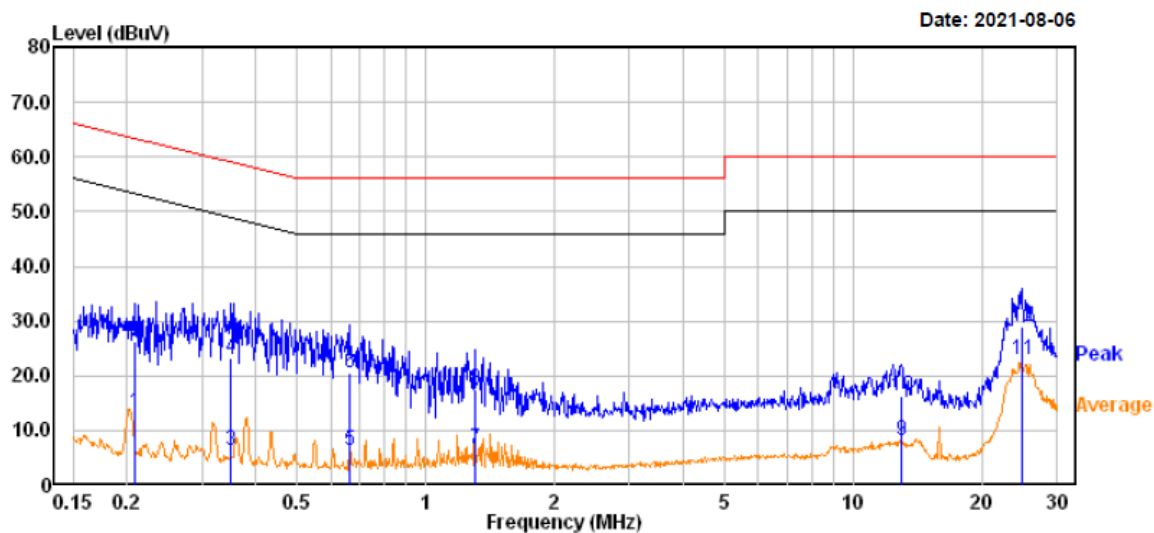
Model: Bell 5S

AC 120V/60 Hz, Line



		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.189	-14.00	19.82	5.82	54.10	-48.28	Average
2	0.189	3.00	19.82	22.82	64.10	-41.28	QP
3	0.246	-13.50	19.82	6.32	51.90	-45.58	Average
4	0.246	-0.50	19.82	19.32	61.90	-42.58	QP
5	0.372	-14.80	19.78	4.98	48.47	-43.49	Average
6	0.372	-0.90	19.78	18.88	58.47	-39.59	QP
7	12.666	-12.00	19.60	7.60	50.00	-42.40	Average
8	12.666	0.80	19.60	20.40	60.00	-39.60	QP
9	23.617	3.00	19.76	22.76	50.00	-27.24	Average
10	23.617	9.30	19.76	29.06	60.00	-30.94	QP
11	24.824	2.70	19.70	22.40	50.00	-27.60	Average
12	24.824	8.70	19.70	28.40	60.00	-31.60	QP

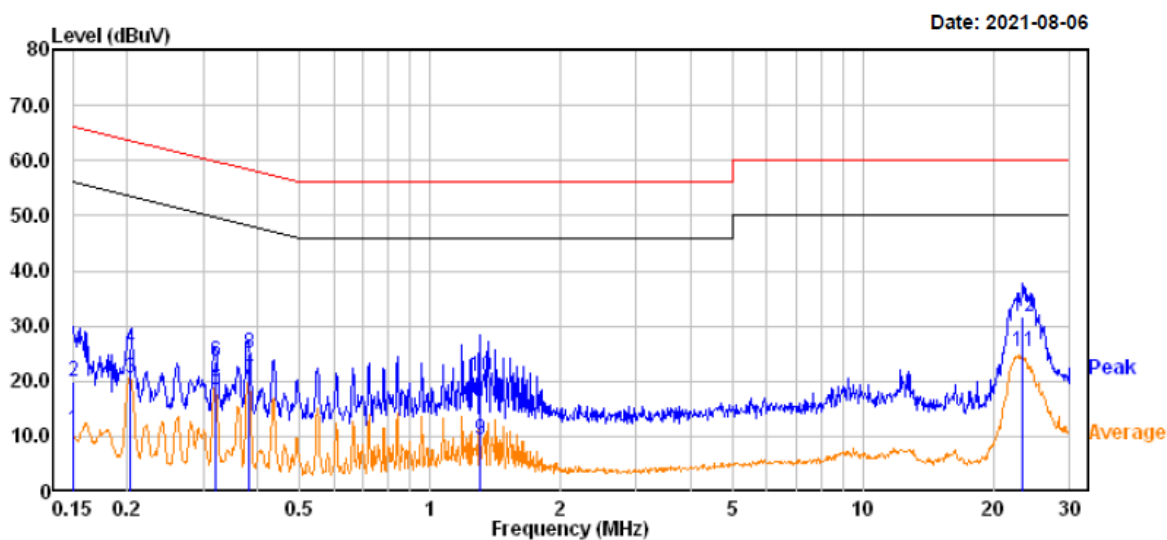
## AC 120V/60 Hz, Neutral



		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.208	-6.51	19.82	13.31	53.27	-39.96	Average
2	0.208	6.30	19.82	26.12	63.27	-37.15	QP
3	0.350	-13.53	19.81	6.28	48.96	-42.68	Average
4	0.350	3.30	19.81	23.11	58.96	-35.85	QP
5	0.662	-13.36	19.75	6.39	46.00	-39.61	Average
6	0.662	0.70	19.75	20.45	56.00	-35.55	QP
7	1.305	-13.10	19.82	6.72	46.00	-39.28	Average
8	1.305	-2.20	19.82	17.62	56.00	-38.38	QP
9	12.986	-11.51	19.60	8.09	50.00	-41.91	Average
10	12.986	-3.40	19.60	16.20	60.00	-43.80	QP
11	24.824	3.29	19.70	22.99	50.00	-27.01	Average
12	24.824	9.30	19.70	29.00	60.00	-31.00	QP

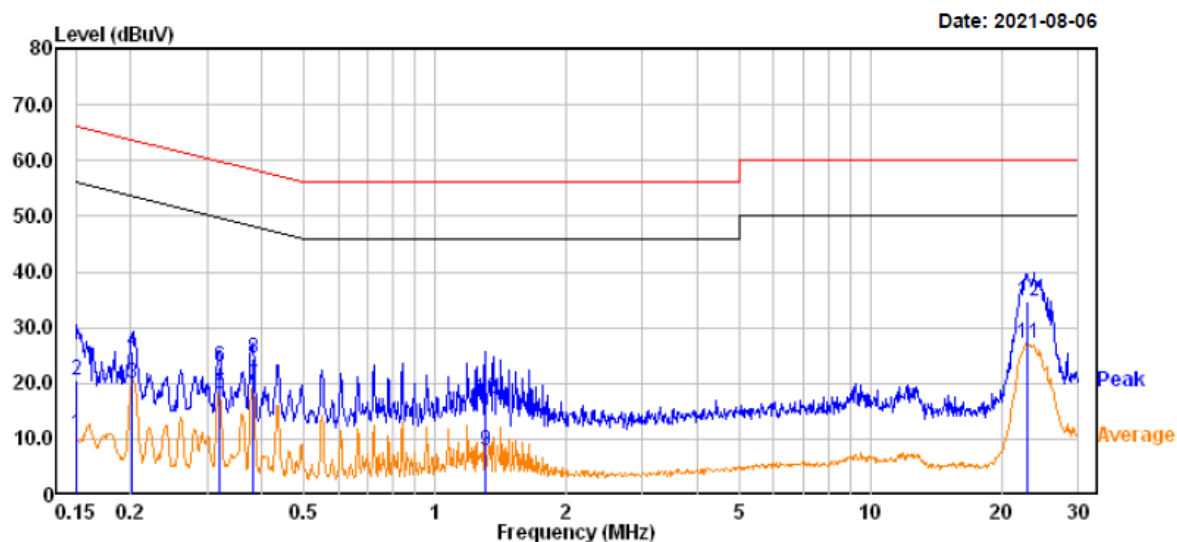
Model: Bell 9S

AC 120V/60 Hz, Line



		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.150	-8.80	19.82	11.02	56.00	-44.98	Average
2	0.150	0.00	19.82	19.82	66.00	-46.18	QP
3	0.203	0.80	19.82	20.62	53.47	-32.85	Average
4	0.203	6.10	19.82	25.92	63.47	-37.55	QP
5	0.320	-1.30	19.82	18.52	49.71	-31.19	Average
6	0.320	3.60	19.82	23.42	59.71	-36.29	QP
7	0.381	0.59	19.77	20.36	48.26	-27.90	Average
8	0.381	5.39	19.77	25.16	58.26	-33.10	QP
9	1.305	-10.50	19.82	9.32	46.00	-36.68	Average
10	1.305	1.00	19.82	20.82	56.00	-35.18	QP
11	23.382	5.50	19.77	25.27	50.00	-24.73	Average
12	23.382	12.00	19.77	31.77	60.00	-28.23	QP

## AC 120V/60 Hz, Neutral



		Read			Limit	Over	
	Freq	Level	Factor	Level	Line	Limit	Remark
	MHz	dBuV	dB	dBuV	dBuV	dB	
1	0.150	-8.90	19.82	10.92	56.00	-45.08	Average
2	0.150	0.80	19.82	20.62	66.00	-45.38	QP
3	0.201	0.10	19.82	19.92	53.56	-33.64	Average
4	0.201	5.70	19.82	25.52	63.56	-38.04	QP
5	0.320	-1.70	19.82	18.12	49.71	-31.59	Average
6	0.320	3.10	19.82	22.92	59.71	-36.79	QP
7	0.381	-0.01	19.77	19.76	48.26	-28.50	Average
8	0.381	4.79	19.77	24.56	58.26	-33.70	QP
9	1.305	-11.90	19.82	7.92	46.00	-38.08	Average
10	1.305	-2.60	19.82	17.22	56.00	-38.78	QP
11	23.035	7.41	19.78	27.19	50.00	-22.81	Average
12	23.035	14.91	19.78	34.69	60.00	-25.31	QP

## FCC§15.205, §15.209&§15.249- RADIATED EMISSIONS & OUT OF BAND EMISSION

### Applicable Standard

As per FCC§15.249 (a), except as provided in paragraph (b) of this section, the field strength of emissions from intentional radiators operated within these frequency bands shall comply with the following:

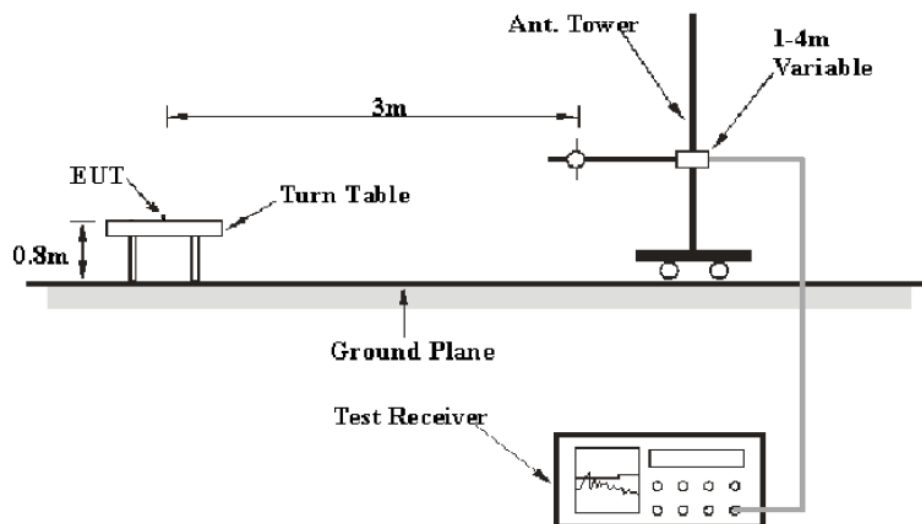
Fundamental frequency	Field strength of fundamental (millivolts/meter)	Field strength of harmonics (microvolts/meter)
902–928 MHz	50	500
2400–2483.5 MHz	50	500
5725–5875 MHz	50	500
24GHz-24.25GHz	250	2500

As per FCC§15.249 (c), Field strength limits are specified at a distance of 3 meters.

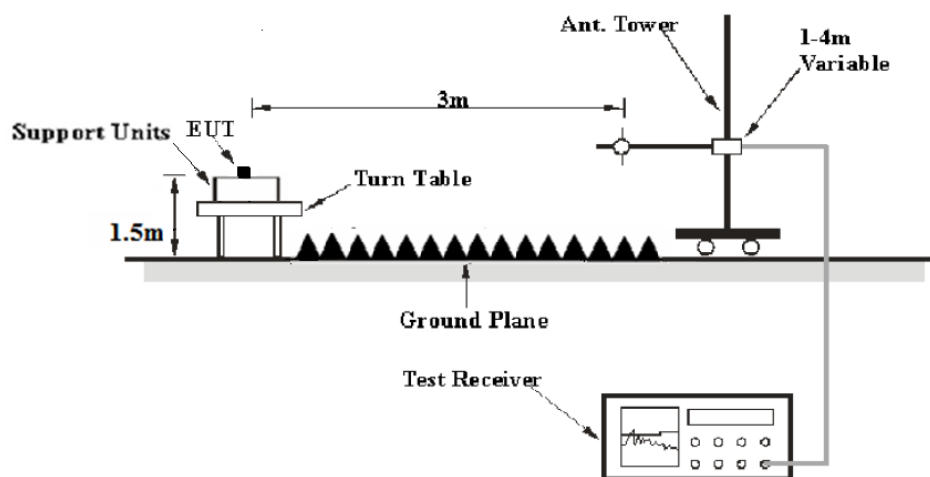
(d) Emissions radiated outside of the specified frequency bands, except for harmonics, shall be attenuated by at least 50 dB below the level of the fundamental or to the general radiated emission limits in §15.209, whichever is the lesser attenuation.

### EUT Setup

Below 1 GHz:



Above 1 GHz:



The radiated emission and out of band emission tests were performed in the 3 meters chamber test site, using the setup accordance with the ANSI C63.10-2013. The specification used was the FCC 15.209/15.205 and FCC 15.249 limits.

The external I/O cables were draped along the test table and formed a bundle 30 to 40 cm long in the middle.

### Test Equipment Setup

The system was investigated from 30 MHz to 10GHz.

During the radiated emission test, the EMI test receiver Setup was set with the following configurations:

Frequency Range	RBW	Video B/W	Detector
30 MHz – 1000 MHz	120 kHz	300 kHz	QP
Above 1GHz	1MHz	3 MHz	PK
	1MHz	3 MHz	AVG

### Test Procedure

Maximizing procedure was performed on the highest emissions to ensure that the EUT complied with all installation combinations.

Data was recorded in Quasi-peak detection mode for frequency range of 30 MHz-1 GHz, peak and Average detection modes for frequencies above 1 GHz.

## Corrected Amplitude & Margin Calculation

The Corrected Amplitude is calculated by adding the Antenna Factor and Cable Loss, and subtracting the Amplifier Gain from the Meter Reading. The basic equation is as follows:

Corrected Amplitude (dBμV/m) = Meter Reading (dBμV) + Antenna Factor (dB/m) + Cable Loss (dB) - Amplifier Gain (dB)

The “**Margin**” column of the following data tables indicates the degree of compliance with the applicable limit. For example, a margin of 7dB means the emission is 7dB below the limit. The equation for margin calculation is as follows:

Margin (dB) = Limit (dBμV/m) - Corrected Amplitude (dBμV/m)

## Test Results Summary

According to the data in the following table, the EUT complied with the FCC Part 15.209 &15.205 & 15.249.

### Test Data

#### Environmental Conditions

<b>Temperature:</b>	24.9 °C
<b>Relative Humidity:</b>	51 %
<b>ATM Pressure:</b>	101.3 kPa

*The testing was performed by Stone Zhang on 2021-06-04.*



Powered by adapter:

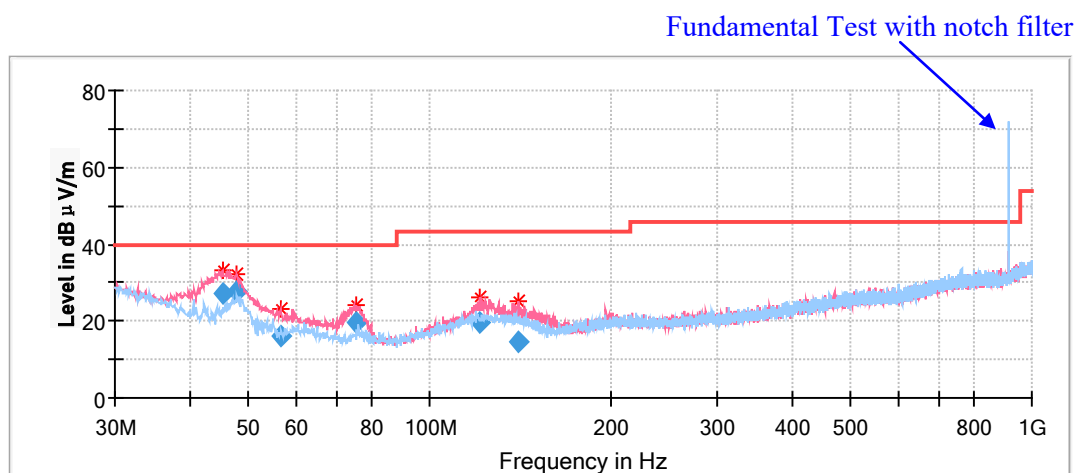
Model: Bell 5S

For Adapter-1:

### Spurious Emission Test:

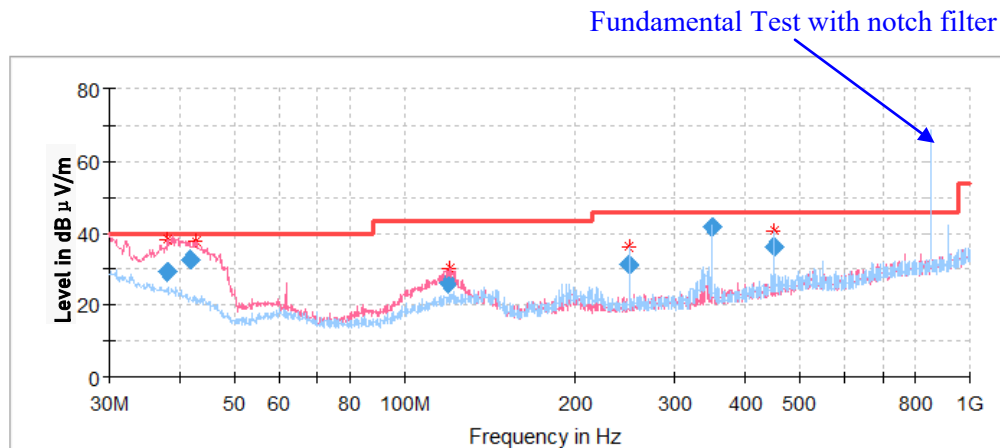
#### 30 MHz - 1 GHz

(Pre-scan in the X, Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded.)



Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	QuasiPeak (dB μ V/m)	Height (cm)	Polar (H/V)				
45.276400	27.08	100.0	V	352.0	-14.4	40.00	12.92
47.820450	27.55	100.0	V	163.0	-15.2	40.00	12.45
56.438700	16.22	100.0	V	41.0	-15.7	40.00	23.78
75.347100	19.77	100.0	V	152.0	-17.1	40.00	20.23
121.056850	19.76	100.0	V	163.0	-10.9	43.50	23.74
140.829200	14.73	100.0	V	257.0	-11.8	43.50	28.77

For Adapter-2:

**Spurious Emission Test:****30 MHz - 1 GHz**(Pre-scan in the X, Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded.)

Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	QuasiPeak (dB μ V/m)	Height (cm)	Polar (H/V)				
37.925100	29.17	100.0	V	147.0	-9.0	40.00	10.83
41.669850	32.57	100.0	V	183.0	-11.6	40.00	7.43
119.274800	26.00	100.0	V	290.0	-11.0	43.50	17.50
250.005750	31.33	100.0	H	54.0	-11.9	46.00	14.67
350.017150	41.58	100.0	H	314.0	-9.4	46.00	4.42
450.008200	36.14	100.0	H	0.0	-6.9	46.00	9.86

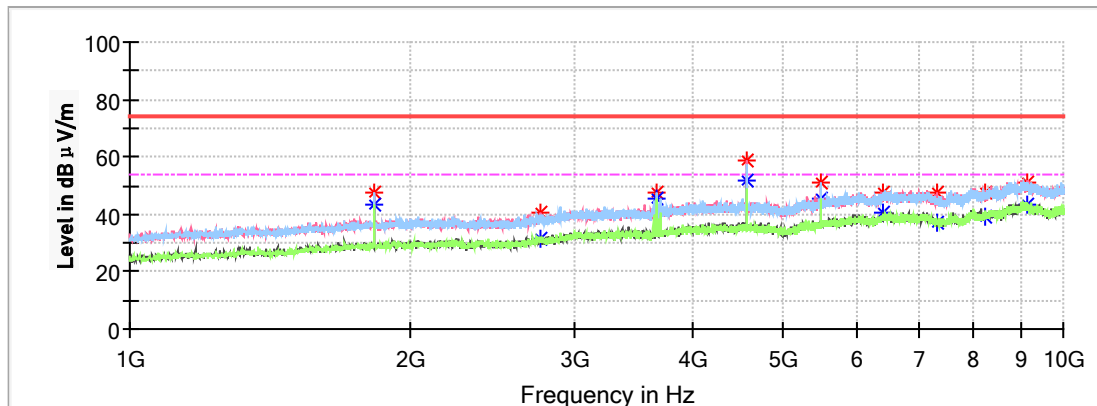
**For adapter-1(worse case):****1GHz-10GHz**(Pre-scan in the X, Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded.)

Note:

1. This test was performed with the 902-928 MHz notch filter.
2. Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)  
 Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)  
 Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

**Channel: 915MHz**

Full Spectrum



Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)				
1829.800000	---	43.55	150.0	V	206.0	-5.4	54.00	10.45
1829.800000	47.71	---	150.0	V	206.0	-5.4	74.00	26.29
2748.700000	---	31.18	200.0	H	15.0	-3.0	54.00	22.82
2748.700000	40.52	---	200.0	H	15.0	-3.0	74.00	33.48
3659.500000	---	45.24	150.0	H	260.0	-1.0	54.00	8.76
3659.500000	47.49	---	150.0	H	260.0	-1.0	74.00	26.51
4574.800000	58.54	---	150.0	V	2.0	1.1	74.00	15.46
4574.800000	---	50.57	150.0	V	2.0	1.1	54.00	3.43
5490.100000	---	45.41	150.0	H	0.0	2.6	54.00	8.59
5490.100000	51.33	---	150.0	H	0.0	2.6	74.00	22.67
6404.500000	47.40	---	200.0	H	144.0	5.2	74.00	26.60
6404.500000	---	40.54	200.0	H	144.0	5.2	54.00	13.46
7320.700000	---	36.95	200.0	V	145.0	5.1	54.00	17.05
7320.700000	47.29	---	200.0	V	145.0	5.1	74.00	26.71
8236.000000	---	39.01	150.0	V	2.0	6.7	54.00	14.99
8236.000000	47.53	---	150.0	V	2.0	6.7	74.00	26.47
9154.900000	51.24	---	200.0	V	108.0	9.4	74.00	22.76
9154.900000	---	43.10	200.0	V	108.0	9.4	54.00	10.90

**Restricted Bands Emissions Test:**

(Pre-scan in the X, Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded.)

Note: Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)

Corrected Amplitude (dBμV/m) = Corrected Factor (dB/m) + Reading (dBμV)

Margin (dB) = Limit (dBμV/m) – Corrected Amplitude (dBμV/m)

For Adapter-1:

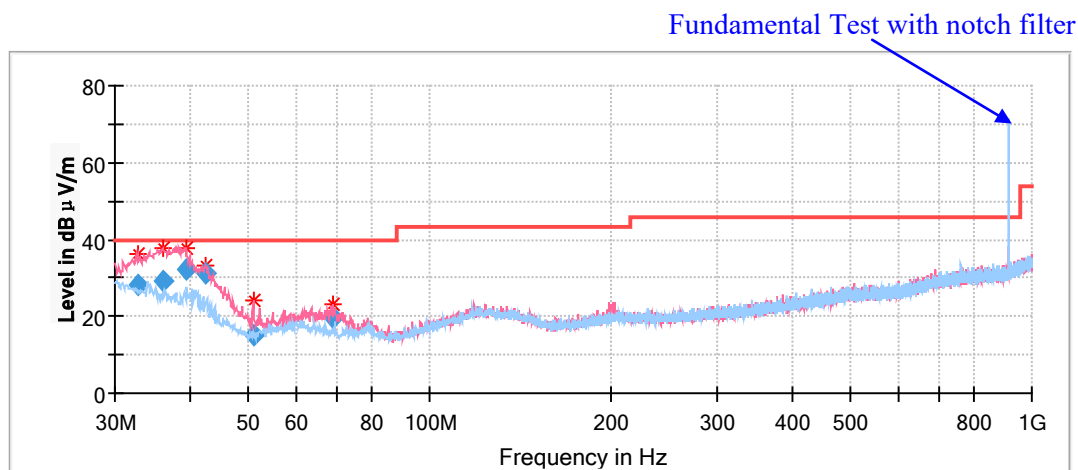
Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)	Degree			
Channel: 915MHz								
902	37.42	QP	150	H	92	-0.1	46	8.58
902	38.44	QP	200	V	198	-0.1	46	7.56
915	90.93	QP	150	H	139	0.2	94	3.07
915	90.11	QP	100	V	131	0.2	94	3.89
928	36.22	QP	250	H	287	1.1	46	9.78
928	36.89	QP	200	V	284	1.1	46	9.11

For Adapter-2:

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)	Degree			
Channel: 908.4MHz								
902	35.84	QP	150	H	92	-0.1	46	10.16
902	36.22	QP	200	V	198	-0.1	46	9.78
915	90.73	QP	150	H	139	0.2	94	3.27
915	90.58	QP	100	V	131	0.2	94	3.42
928	36.19	QP	250	H	287	1.1	46	9.81
928	36.84	QP	200	V	284	1.1	46	9.16

Model: Bell 9S

For Adapter-1:

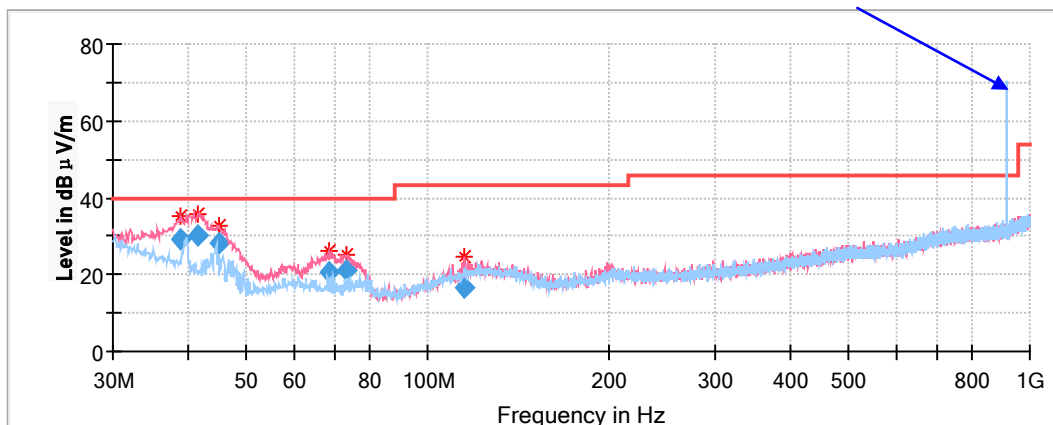
**Spurious Emission Test:****30 MHz - 1 GHz**(Pre-scan in the X, Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded.)

Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	QuasiPeak (dB μ V/m)	Height (cm)	Polar (H/V)				
32.667500	28.39	100.0	V	32.0	-5.5	40.00	11.61
36.062500	29.53	100.0	V	60.0	-7.8	40.00	10.47
39.336250	32.87	100.0	V	32.0	-10.0	40.00	7.13
42.488750	31.25	100.0	V	43.0	-12.1	40.00	8.75
50.976250	16.95	100.0	V	131.0	-17.0	40.00	23.05
69.163750	19.08	100.0	V	148.0	-16.6	40.00	20.92

For Adapter-2:

**Spurious Emission Test:****30 MHz - 1 GHz***(Pre-scan in the X, Y and Z axes of orientation, the worst case Y-axis of orientation was recorded.)*

Fundamental Test with notch filter



Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dB $\mu$ V/m)	Margin (dB)
	QuasiPeak (dB $\mu$ V/m)	Height (cm)	Polar (H/V)				
38.978000	29.33	100.0	V	290.0	-10.5	40.00	10.67
41.514645	30.15	100.0	V	179.0	-11.2	40.00	9.85
44.912050	28.07	100.0	V	158.0	-13.2	40.00	11.93
68.435450	20.84	100.0	V	23.0	-16.5	40.00	19.16
73.280000	21.00	100.0	V	213.0	-16.9	40.00	19.00
115.368200	16.46	100.0	V	147.0	-11.6	43.50	27.04

Powered by DC source:

Model: Bell 5S

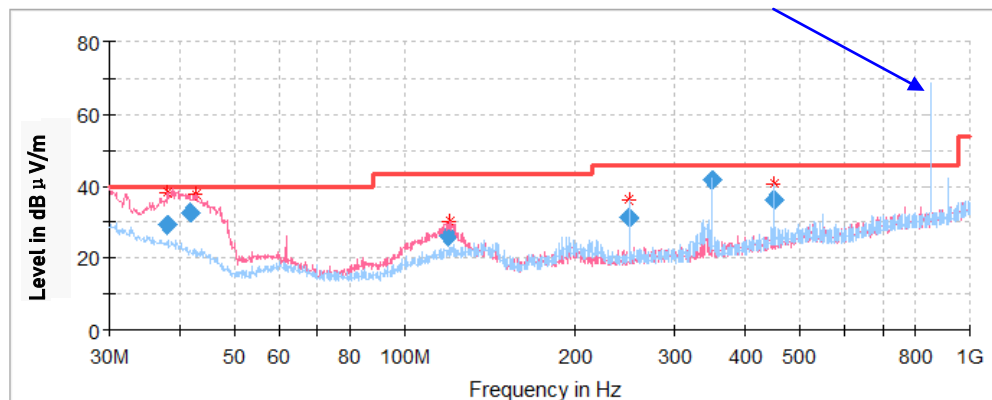
EUT operation mode: Transmitting

### Spurious Emission Test:

#### 30MHz-1GHz:

(Pre-scan in the X, Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded.)

Fundamental Test with notch filter



Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	Quasi Peak (dBμV/m)	Height (cm)	Polar (H/V)				
37.925100	29.17	100.0	V	147.0	-9.0	40.00	10.83
41.669850	32.57	100.0	V	183.0	-11.6	40.00	7.43
119.274800	26.00	100.0	V	290.0	-11.0	43.50	17.50
250.005750	31.33	100.0	H	54.0	-11.9	46.00	14.67
350.017150	41.58	100.0	H	314.0	-9.4	46.00	4.42
450.008200	36.14	100.0	H	0.0	-6.9	46.00	9.86

Model: Bell 9S

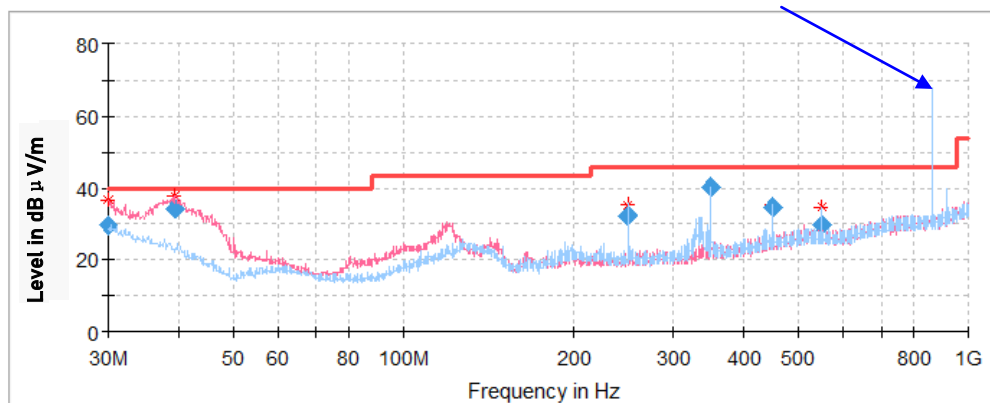
EUT operation mode: Transmitting

### Spurious Emission Test:

#### 30MHz-1GHz:

(Pre-scan in the X, Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded.)

Fundamental Test with notch filter



Frequency (MHz)	Corrected Amplitude	Rx Antenna		Turntable Degree	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	Quasi Peak (dBμV/m)	Height (cm)	Polar (H/V)				
30.097850	29.70	100.0	V	92.0	-4.4	40.00	10.30
39.456650	34.10	100.0	V	141.0	-9.5	40.00	5.90
250.002150	32.36	100.0	H	83.0	-11.9	46.00	13.64
350.012050	40.33	100.0	H	298.0	-9.4	46.00	5.67
450.010300	34.48	100.0	H	359.0	-6.9	46.00	11.52
550.025050	29.93	200.0	H	259.0	-5.2	46.00	16.07



**Restricted Bands Emissions Test:**

(Pre-scan in the X, Y and Z axes of orientation, the worst case **Y-axis of orientation** was recorded.)

Note: Corrected Factor (dB/m) = Antenna factor (RX) (dB/m) + Cable Loss (dB) – Amplifier Factor (dB)

Corrected Amplitude (dB $\mu$ V/m) = Corrected Factor (dB/m) + Reading (dB $\mu$ V)

Margin (dB) = Limit (dB $\mu$ V/m) – Corrected Amplitude (dB $\mu$ V/m)

Frequency (MHz)	Corrected Amplitude		Rx Antenna		Turntable	Corrected Factor (dB/m)	Limit (dBμV/m)	Margin (dB)
	MaxPeak (dBμV/m)	Average (dBμV/m)	Height (cm)	Polar (H/V)	Degree			
Channel: 915MHz								
902	34.22	QP	150	H	224	-0.1	46	11.78
902	35.28	QP	200	V	180	-0.1	46	10.72
915	89.11	QP	150	H	125	0.2	94	4.89
915	88.47	QP	100	V	147	0.2	94	5.53
928	35.16	QP	250	H	255	1.1	46	10.84
928	34.55	QP	200	V	176	1.1	46	11.45

## FCC §15.215(c) – 20 dB BANDWIDTH TESTING

### Applicable Standard

Intentional radiators operating under the alternative provisions to the general emission limits, as contained in §§ 15.217 through 15.257 and in Subpart E of this part, must be designed to ensure that the 20 dB bandwidth of the emission, or whatever bandwidth may otherwise be specified in the specific rule section under which the equipment operates, is contained within the frequency band designated in the rule section under which the equipment is operated.

### Test Procedure

1. Check the calibration of the measuring instrument using either an internal calibrator or a known signal from an external generator.
2. Position the EUT on the test table without connection to measurement instrument. Turn on the EUT. Then set it to any one convenient frequency within its operating range. Set a reference level on the measuring instrument equal to the highest peak value.
3. Measure the frequency difference of two frequencies that were attenuated 20 dB from the reference level. Record the frequency difference as the emission bandwidth.
4. Repeat above procedures until all frequencies measured were complete.

### Test Data

#### Environmental Conditions

Temperature:	25.3 °C
Relative Humidity:	50 %
ATM Pressure:	101.3 kPa

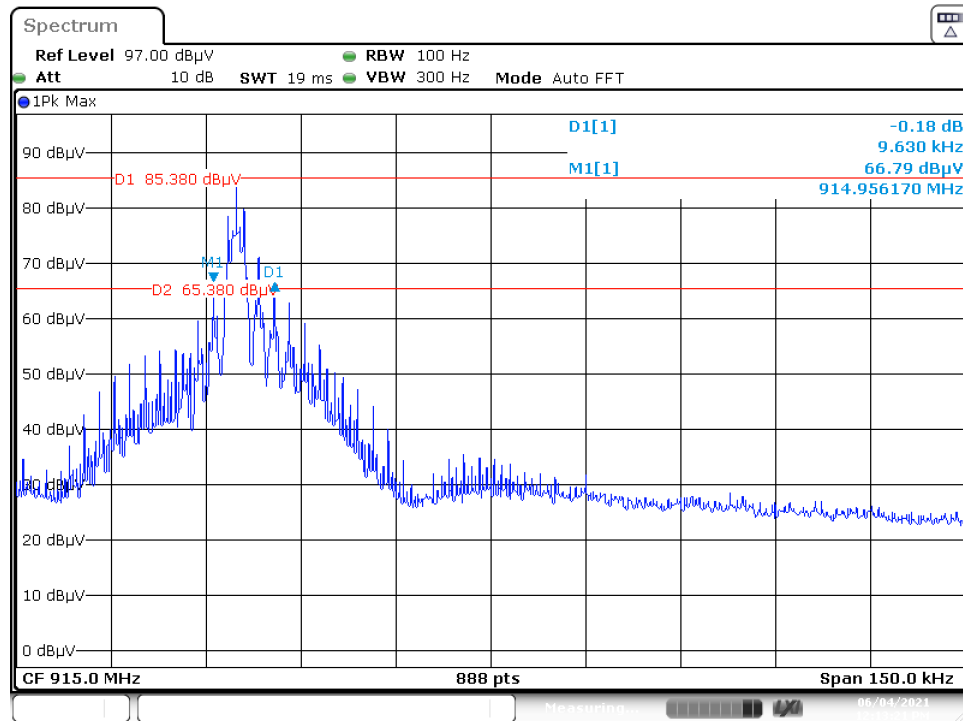
*The testing was performed by Stone Zhang on 2021-06-04.*

**Test Result:** Compliant.

*Test Mode: Transmitting*

Channel	Frequency (MHz)	20 dB Bandwidth (kHz)
1	915	9.630

Channel : 915MHz



Date: 4.JUN.2021 12:13:21

### **Declarations**

1: BACL is not responsible for the authenticity of any test data provided by the applicant. Data included from the applicant that may affect test results are marked with an asterisk '\*'. Customer model name, addresses, names, trademarks etc. are not considered data.

2: Unless otherwise stated the results shown in this test report refer only to the sample(s) tested.

3: Otherwise required by the applicant or Product Regulations, Decision Rule in this report did not consider the uncertainty.

4: The extended uncertainty given in this report is obtained by combining the standard uncertainty times the coverage factor K with the 95% confidence interval.

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