

EVALUATION REPORT

for Certification of Conformity

FCC Part 18

Applicant: LG Electronics USA, Inc.
111 Sylvan Avenue North Building
Englewood Cliffs New Jersey United States 07632,
Attn: David Kim / Team leader

Date of Issue: Oct. 07, 2024
Order Number: GETEC-C1-24-708
Test Report Number: GETEC-E3-24-127
Test Site: GUMI UNIVERSITY EMC CENTER
CAB Designation Number: KR0033

FCC ID. : BEJQ50941HA

Applicant: LG Electronics USA, Inc.

Rule Part(s)	: FCC Part 18
Test Method	: FCC/OET MP-5
EUT Type	: HOUSEHOLD COOKTOP
Equipment Class	: Part 18 Consumer Device(8CC)
Type of Authority	: Certification
Model Name	: CBIH3617BE
Trade Mark	: LG

This equipment has been shown to be in compliance with the applicable technical standards as indicated in the measurement report and was tested in accordance with the measurement procedures specified in FCC/OET MP-5 (1986)

I attest to the accuracy of data. All measurements reported herein were performed by me or were made under my supervision and are correct to the vest of my knowledge and belief. I assume full responsibility for the completeness of these measurements and vouch for the qualifications of all persons taking them.

Tested by,



Tak Dong Kim, Associate Engineer
GUMI UNIVERSITY EMC CENTER

Reviewed by,



Sung Joo Park, Technical Manager
GUMI UNIVERSITY EMC CENTER



Revision list

Test Report No.	Issue Date	Description
GETEC-E3-24-127	Oct. 07, 2024	First Approval Test Report

※ This test report is not related to the accredited test result by ISO/IEC 17025 and KOLAS





CONTENTS

1. GENERAL INFORMATION	4
2. INTRODUCTION	6
3. PRODUCT INFORMATION	7
3.1 DESCRIPTION OF EUT.....	7
3.2 SUPPORT EQUIPMENT / CABLES USED	8
3.3 MODIFICATION ITEM(S).....	8
4. DESCRIPTION OF TESTS.....	9
4.1 TEST CONDITION.....	9
5. SUMMARY OF TEST RESULTS	9
6. CONDUCTED EMISSION.....	10
6.1 OPERATING ENVIRONMENT	11
6.2 TEST SET-UP	11
6.3 MEASUREMENT UNCERTAINTY.....	11
6.4 LIMIT	12
6.5 TEST EQUIPMENT USED.....	12
6.6 TEST DATA FOR CONDUCTED EMISSION	12
7. RADIATED EMISSION	23
7.1 OPERATING ENVIRONMENT	23
7.2 TEST SET-UP	23
7.3 MEASUREMENT UNCERTAINTY.....	25
7.4 LIMIT	26
7.5 TEST EQUIPMENT USED.....	26
7.6 TEST DATA FOR RADIATED EMISSION.....	27
8. SAMPLE CALCULATIONS.....	49
8.1 EXAMPLE 1 :	49
8.2 EXAMPLE 2 :	49
9. RECOMMENDATION & CONCLUSION.....	50
 APPENDIX A – ATTESTATION STATEMENT	
APPENDIX B – INFORMATION OF CLASS II PERMISSIVE CHANGE	
APPENDIX C – SCHEMATIC DIAGRAM	
APPENDIX D – TEST SETUP PHOTOGRAPH	
APPENDIX E – INTERNAL PHOTOGRAPH	
APPENDIX F – RF EXPOSURE EVALUATION	



Scope: Measurement and determination of electromagnetic emissions (EME) of radio frequency devices including intentional and / or unintentional radiators for compliance with technical rules and regulations of the Federal Communications Commission.

1. General Information

Applicant: LG Electronics USA, Inc.

Applicant Address: 111 Sylvan Avenue North Building
Englewood Cliffs New Jersey United States 07632

Manufacturer: LG Electronics Inc.

Manufacturer Address: 170, Sungsanpaechong-ro, Seongsan-gu, Changwon-si,
Gyeongsangnam-do, 51533, Korea

Manufacturer: Shinsung Delta Tech Co., LTD.

1. Manufacturer Address: 39, Gongdan-ro 271 beon-gil, Seongsan-gu, Changwon-si,
Gyeongsangnam-do, 51558, Korea

2. Manufacturer Address: Standard Factory 6, 200 Free Trade 3-gil, Masanhoewon-gu,
Changwon-si, Gyeongsangnam-do, 51340, Korea

Contact Person: David Kim / Team leader

Telephone Number: 1-201-266-2443



- **FCC ID.** BEJQ50941HA
- **EUT Type** HOUSEHOLD COOKTOP
- **Model Name** CBIH3617BE
- **Rule Part(s)** FCC Part 18
- **Test Method** FCC/OET MP-5
- **Type of Authority** Certification
- **Test Procedure(s)** FCC/OET MP-5
- **Dates of Test** Sep. 26, 2024 ~ Oct. 05, 2024
- **Place of Test**
GUMI UNIVERSITY EMC CENTER
(FCC Test Firm Registration Number: 269701)
(ISED Test Site Registration Number: 7920A)
37 Yaeun-ro, Gumi-si, Gyeongsangbuk-do, 39213, Republic of Korea.
- **Test Report Number** GETEC-E3-24-127
- **Dates of Issue** Oct. 07, 2024



2. Introduction

The measurement procedure described in American National Standard for Methods of Measurement of Radio-Nose Emissions From Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz (ANSI C63.4-2017) was used in determining radiated and conducted emissions emanating from **HOUSEHOLD COOKTOP (Model name: CBIH3617BE)**.

These measurement tests were conducted at **GUMI UNIVERSITY EMC CENTER**

The site address is 37 Yaeun-ro, Gumi-si, Gyeongsangbuk-do, 39213, Republic of Korea.

This test site is one of the highest point of Gumi UNIVERSITY at about 200 km away from Seoul city and 40 km away from Daegu city. It is located in the valley surrounded by mountains in all directions where ambient radio signal conditions are quiet and a favorable area to measure the radio frequency interference on open field test site for the computing and ISM devices manufactures. The detailed description of the measurement facility was found to be in compliance with the requirements of §2.948 according to ANSI C63.4 (2017)

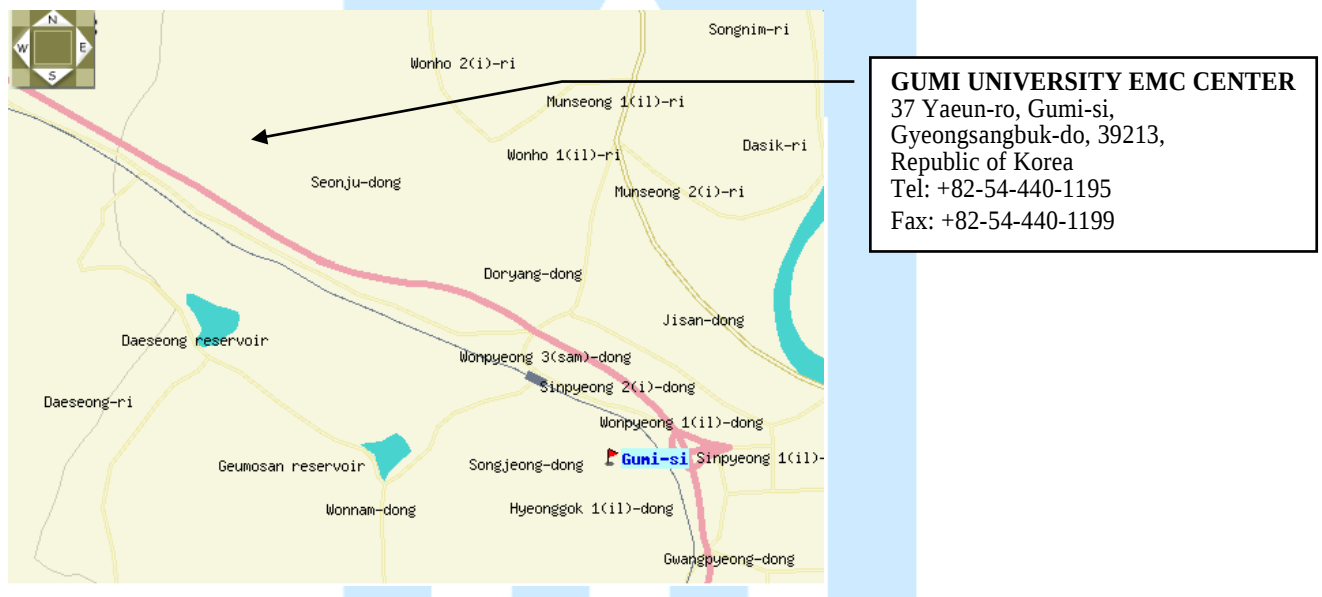


Fig 1. The map above shows the GUMI UNIVERSITY in vicinity area.



3. Product Information

3.1 Description of EUT

The Equipment under Test (EUT) is the **HOUSEHOLD COOKTOP (Model Name: CBIH3617BE)**
FCC ID.: BEJQ50941HA

Models		CBIH3617BE		
Description		Induction Cooktop		
Electrical Specifications	Connection voltage	240/208 VAC 60 Hz., 45.8 A / 41.7 A		
	Maximum connected power load	11000 W / 8670 W		
Cooktop Dimensions		36 5/8" (930 mm) (W) × 3 11/16" (94 mm) (H) × 21 1/16" (534 mm) (D)		
Countertop Cutout Dimensions		Standard Installation 33 7/8" (860 mm) (W) × 5 3/4" (146 mm) (H) × 19 1/8" (486 mm) (D)		
Cooking Zones		Position	Size	Power (Level 9 / Boost)
		Front Left	8 1/2" × 14 9/16" (216.2 × 370 mm)	1510/3030 W (208 V) 1850/3700 W (240 V)
		Front Right	7" (177.8 mm)	1470/2290 W (208 V) 1800/2800 W (240 V)
		Flex Left	8 1/2" × 14 9/16" (216.2 × 370 mm)	2700/3030 W (208 V) 3300/3700 W (240 V)
		Rear Left	8 1/2" × 14 9/16" (216.2 × 370 mm)	1510/3030 W (208 V) 1850/3700 W (240 V)
		Rear Right	6" (152.4 mm)	1150/1472 W (208 V) 1400/1800 W (240 V)
		Center	11 1/8", 7 1/16" (283, 180 mm)	Inner Burner: 1500/3000 W (208 V) 1850/3700 W (240 V) Dual Burner: 3030/4090 W (208 V) 3700/5000 W (240 V)

RF Module Specifications

Type	Frequency Range	Output Power (Max)
Wi-Fi	2412 MHz - 2462 MHz	< 30 dBm
Bluetooth	2402 MHz - 2480 MHz	

Induction heating mode

Cooking Element	Low frequency (Maximum power)	High frequency (Minimum power)
#1 Left Front Hob	30 kHz	65 kHz
#2 Left Rear Hob	30 kHz	65 kHz
#3 Center	30 kHz	65 kHz
#4 Right Front Hob	30 kHz	65 kHz
#5 Right Rear Hob	30 kHz	65 kHz



3.2 Support Equipment / Cables used

3.3.1 Used Support Equipment

Description	Manufacturer	Model Name	S/N & FCC ID.
None	-	-	S/N: - FCC ID.: -

See “Appendix D – Test Setup Photographs” for actual system test set-up

3.3.2 System configuration

Description	Manufacturer	Model Name	S/N & FCC ID.
WLAN module	LG Electronics Inc.	LCWB-001	S/N: -, FCC ID.: BEJ-LCWB001

3.3.3 Used Cable(s)

Cable Name	Condition	Description
Power cable	Connected to the EUT and AC power	1.80 m Unshielded.

3.3 Modification Item(s)

-. None



4. Description of tests

4.1 Test Condition

The EUT was installed, arranged and operated in a manner that is most representative of equipment as typically used. The measurements were carried out while varying operating modes and cable positions within typically arrangement to determine maximum emission level.

The representative and worst test mode(s) were noted in the test report.

- Test Voltage / Frequency: AC 208V/ 60 Hz, AC 240 V / 60 Hz
- Operating condition during the test(s) :
This device has been tested in the configurations of Induction mode with WLAN module operating.
Induction mode: This device has been operated (boost mode) with an enameled steel vessel filled with tap water up to 80 % of its maximum capacity.

Cooking element "1"= left front hob , "2"= left rear hob, "3"= Center hob, "4"= right front hob, "5"= right rear hob

Cooking vessels

"1" , "2"= 215 mm x 180 mm

"3"= 300 mm

"4"=180 mm

"5"=140 mm

4.2 General Test Procedures

Conducted Emissions

The EUT is placed on the turntable, which is 0.8 m above ground plane. According to the requirements in Section 13.1.4.1 of ANSI C63.4 (2017) Conducted emissions from the EUT measured in the frequency range between 0.15 MHz and 30MHz using CISPR Quasi-peak and average detector modes.

Radiated Emissions

The EUT is placed on a turn table, which is 0.8 m above ground plane. The turntable shall rotate 360 degrees to determine the position of maximum emission level. EUT is set 3 m away from the receiving antenna, which Fixed at 2 m above the ground plane to find out the highest emission.

And also, each emission was to be maximized by the table was turned from 0 degrees to 360 degrees. In order to find out the max emission, the relative positions of this hand-held transmitter (EUT) was rotated through three orthogonal axes according to the requirements in Section 13.1.4.1 of ANSI C63.4 (2017).

5. Summary of Test Results

FCC Part Section(s)	Test Description	Test Result
§18.305	Radiated Emission	Pass
§18.307	Conducted Emission	Pass



6. Conducted Emission

-Test Description

The Line conducted emission test facility is inside a 4 m × 8 m × 2.5 m shielded enclosure.
(FCC Test Firm Registration No.: 269701)

The EUT was placed on a non-conducting 1.0 m by 1.5 m table, which is 0.8 m in height and 0.4 m away from the vertical wall of the shielded enclosure.

The EUT is powered from the Rohde & Schwarz LISN and the support equipment is powered from the Rohde & Schwarz LISN Powers to the LISN are filtered by high-current high insertion loss power line filter.

Sufficient time for EUT, support equipment, and test equipment was allowed in order for them to warm up to their normal operating condition.

The RF output of the LISN was connected to the EMI test receiver

Exploratory measurements were conducted to identify the highest emission by operating the EUT in a range of typical modes of operation, cable positions, system configuration and arrangement.

Based on exploratory measurements, the final measurements were conducted at the worst test conditions.

Exploratory measurements were scanned using Peak mode of EMI Test receiver from 150 kHz to 30 MHz with 20 ms sweep time. The final measurements were measured with Quasi-Peak and Average mode.

The bandwidth of EMI Test Receiver was set to 9 kHz. Interface cables were connected to the available interface ports of the test unit. Excess cable lengths were bundled at center with 30 cm ~ 40 cm.

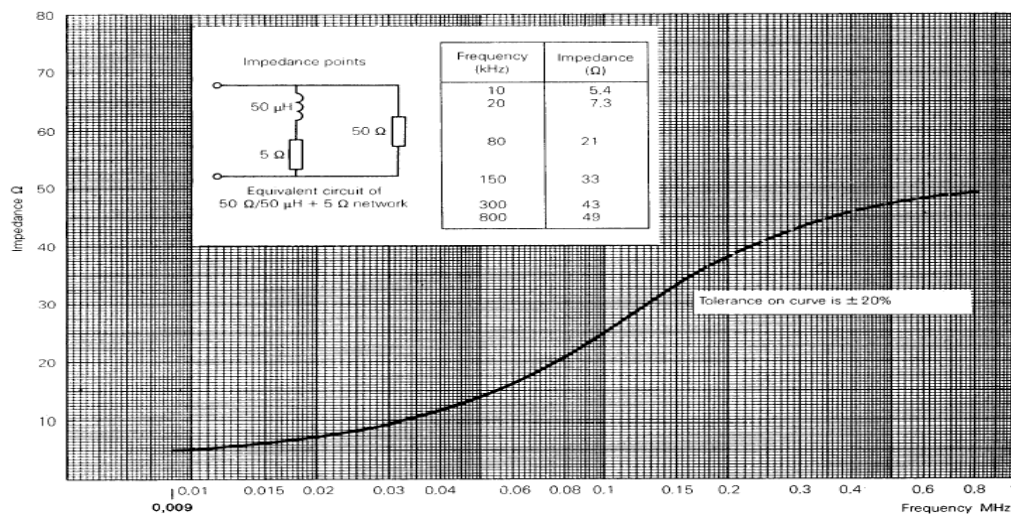


Fig 2. Impedance of LISN



6.1 Operating Environment

Temperature : 22.8 °C
Relative Humidity : 63.8 %
Air Pressure : 100.6 kPa

6.2 Test Set-up

The conducted emission measurements were performed in the shielded room.

The EUT was placed on wooden table, 0.8 m heights above the floor, 0.4 m from the reference ground plane (GRP) wall and 0.8 m from AMN & ISN.

AMN is bonded on horizontal reference ground plane.

The ground plane, which was electrically bonded to the shield room, ground system and all power lines entering the shield room, were filtered.

6.3 Measurement Uncertainty

The measurement uncertainty was calculated in accordance with ISO “Guide to the expression of uncertainty in measurement.”

The measurement uncertainty was given with a confidence of 95 %.

Test Items	Uncertainty	Remark
Conducted emission (9 kHz ~ 150 kHz)	3.83 dB	Confidence level of approximately 95 % ($k = 2$)
Conducted emission (150 kHz ~ 30 MHz)	3.44 dB	Confidence level of approximately 95 % ($k = 2$)

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

The listed uncertainties are the worst case uncertainty for the entire range of measurement. please note that the uncertainty values are provided for informational purposes only are not used in determining the PASS/FAIL results



6.4 Limit

RFI Conducted	FCC Limit(dB μ V/m)	
Freq. Range	Quasi-Peak	Average
0.009 MHz ~ 0.05 MHz	110	-
0.05 MHz ~ 0.15 MHz	90 ~ 80*	-
0.15 MHz ~ 0.5 MHz	66 ~ 56*	56 ~ 46*
0.5 MHz ~ 5 MHz	56	46
5 MHz ~ 30 MHz	60	50
*Limits decreases linearly with the logarithm of frequency.		

6.5 Test Equipment used

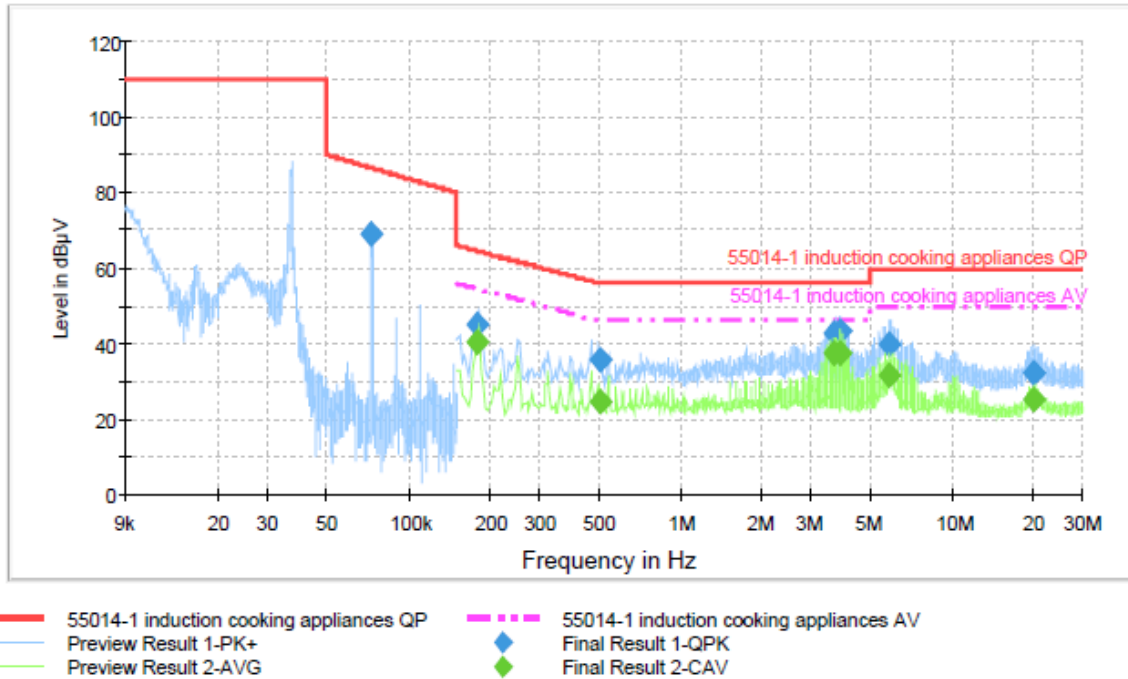
Model Name	Manufacturer	Description	Serial Number	Calibration Date
■ - ESCI	Rohde & Schwarz	EMI Test Receiver	100237	Apr. 03, 2024
□ - ENV216	Rohde & Schwarz	LISN	100173	Apr. 03, 2024
□ - ENV216	Rohde & Schwarz	LISN	100172	Apr. 03, 2024
■ - ESH2-Z5	Rohde & Schwarz	LISN	829991/009	Apr. 04, 2024
■ - VTSD 9561-D	SCHWARZBECK	Pulse Limiter	32	Apr. 04, 2024
■ - EMC 32	Rohde & Schwarz	Software	Ver.8.53	N/A

6.6 Test data for Conducted Emission

- Test Date	: Sep. 26, 2024
- Resolution Bandwidth	: 200 Hz (9 kHz ~ 0.15 MHz) / 9 kHz (0.15 MHz ~ 30 MHz)
- Frequency Range	: 9 kHz ~ 30 MHz
- Line	: L1: Live, L2: Live
- Comment	: None



▪ Operating condition: Induction mode with WLAN
AC 208 V / 60 Hz
Cooking element #1



Final Result 1

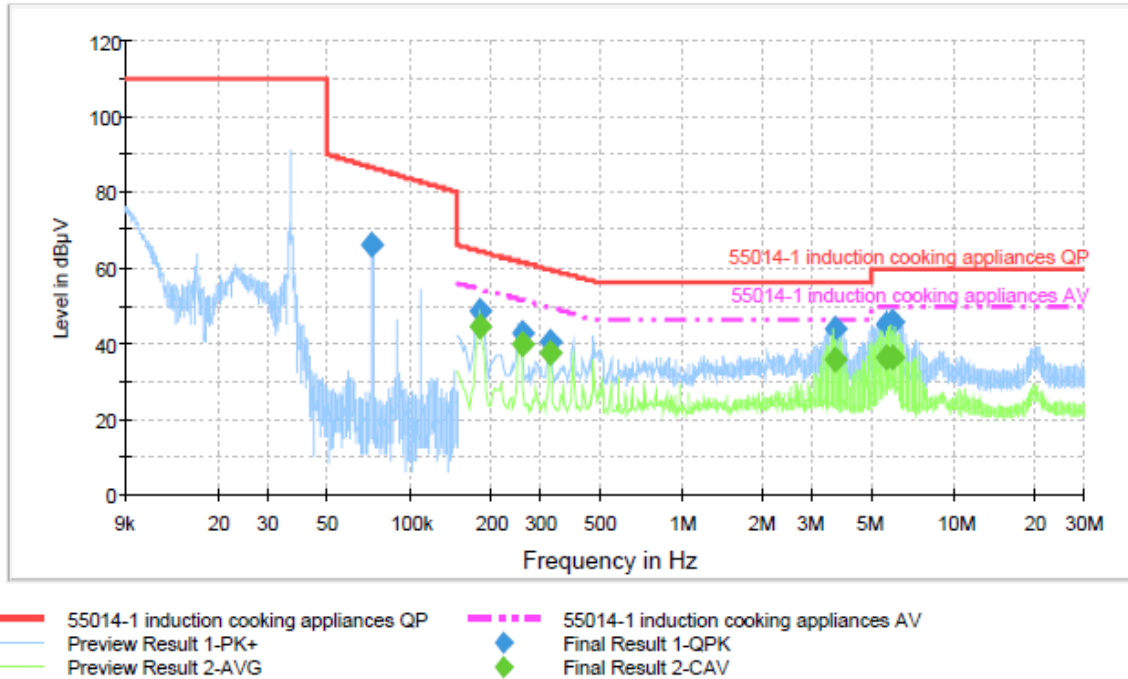
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.072384	68.8	1000.0	0.200	GND	L2	20.1	17.8	86.6	
0.178000	45.0	1000.0	9.000	GND	L2	20.6	19.6	64.6	
0.506156	35.5	1000.0	9.000	GND	L1	20.7	20.5	56.0	
3.674762	43.0	1000.0	9.000	GND	L2	20.7	13.0	56.0	
3.873325	43.6	1000.0	9.000	GND	L1	20.8	12.4	56.0	
5.809306	39.9	1000.0	9.000	GND	L2	20.7	20.1	60.0	
19.928625	32.2	1000.0	9.000	GND	L1	21.0	27.8	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.178000	40.3	1000.0	9.000	GND	L2	20.6	14.3	54.6	
0.506156	24.6	1000.0	9.000	GND	L1	20.7	21.4	46.0	
3.674762	37.4	1000.0	9.000	GND	L2	20.7	8.6	46.0	
3.873325	37.3	1000.0	9.000	GND	L1	20.8	8.7	46.0	
5.809306	31.5	1000.0	9.000	GND	L2	20.7	18.5	50.0	
19.928625	25.0	1000.0	9.000	GND	L1	21.0	25.0	50.0	



Cooking element #2



Final Result 1

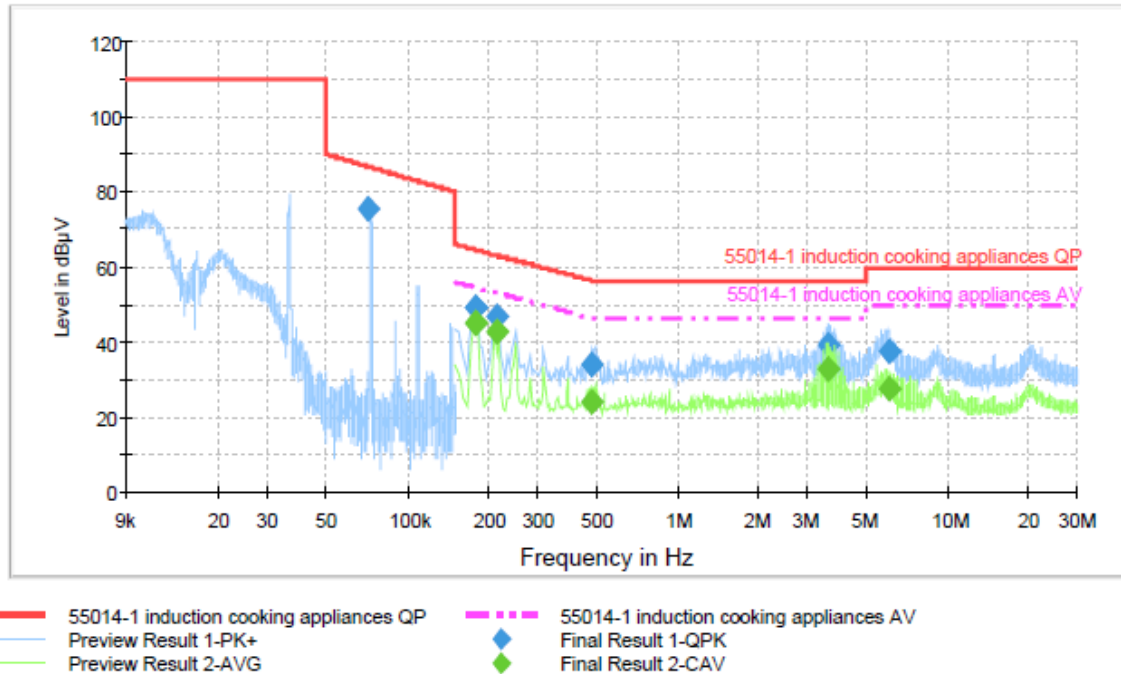
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.072049	66.4	1000.0	0.200	GND	L2	20.1	20.3	86.7	
0.182000	48.5	1000.0	9.000	GND	L2	20.6	15.9	64.4	
0.257744	42.5	1000.0	9.000	GND	L2	20.6	19.0	61.5	
0.328100	40.5	1000.0	9.000	GND	L2	20.6	19.0	59.5	
3.639062	44.1	1000.0	9.000	GND	L1	20.7	11.9	56.0	
5.660056	44.8	1000.0	9.000	GND	L2	20.7	15.2	60.0	
5.958825	45.8	1000.0	9.000	GND	L2	20.7	14.2	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.182000	44.7	1000.0	9.000	GND	L2	20.6	9.7	54.4	
0.257744	39.7	1000.0	9.000	GND	L2	20.6	11.8	51.5	
0.328100	37.7	1000.0	9.000	GND	L2	20.6	11.8	49.5	
3.639062	35.7	1000.0	9.000	GND	L1	20.7	10.3	46.0	
5.660056	36.4	1000.0	9.000	GND	L2	20.7	13.6	50.0	
5.958825	36.5	1000.0	9.000	GND	L2	20.7	13.5	50.0	



Cooking element #3



Final Result 1

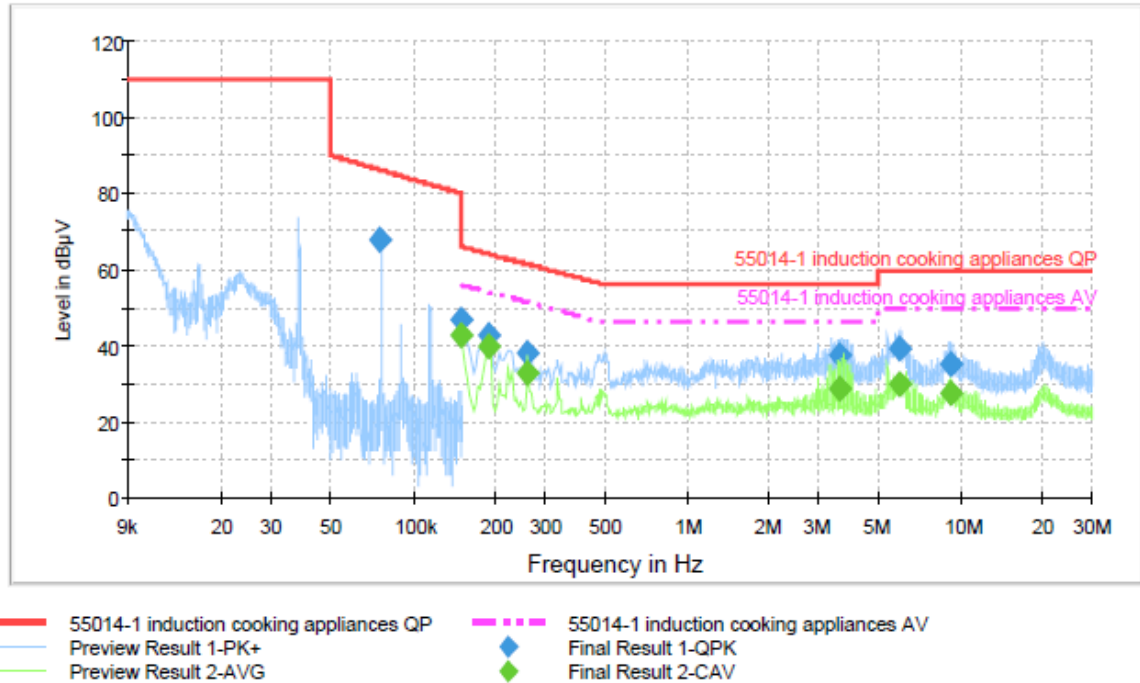
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.071379	75.4	1000.0	0.200	GND	L1	20.2	11.4	86.8	
0.176700	49.2	1000.0	9.000	GND	L2	20.6	15.4	64.6	
0.178000	49.4	1000.0	9.000	GND	L2	20.6	15.2	64.6	
0.213744	46.8	1000.0	9.000	GND	L2	20.6	16.3	63.1	
0.480275	34.2	1000.0	9.000	GND	L1	20.7	22.1	56.3	
3.611600	39.0	1000.0	9.000	GND	L2	20.7	17.0	56.0	
6.034525	37.7	1000.0	9.000	GND	L2	20.7	22.3	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.176700	45.2	1000.0	9.000	GND	L2	20.6	9.4	54.6	
0.178000	45.4	1000.0	9.000	GND	L2	20.6	9.2	54.6	
0.213744	43.0	1000.0	9.000	GND	L2	20.6	10.1	53.1	
0.480275	23.9	1000.0	9.000	GND	L1	20.7	22.5	46.3	
3.611600	32.7	1000.0	9.000	GND	L2	20.7	13.3	46.0	
6.034525	27.6	1000.0	9.000	GND	L2	20.7	22.4	50.0	



Cooking element #4



Final Result 1

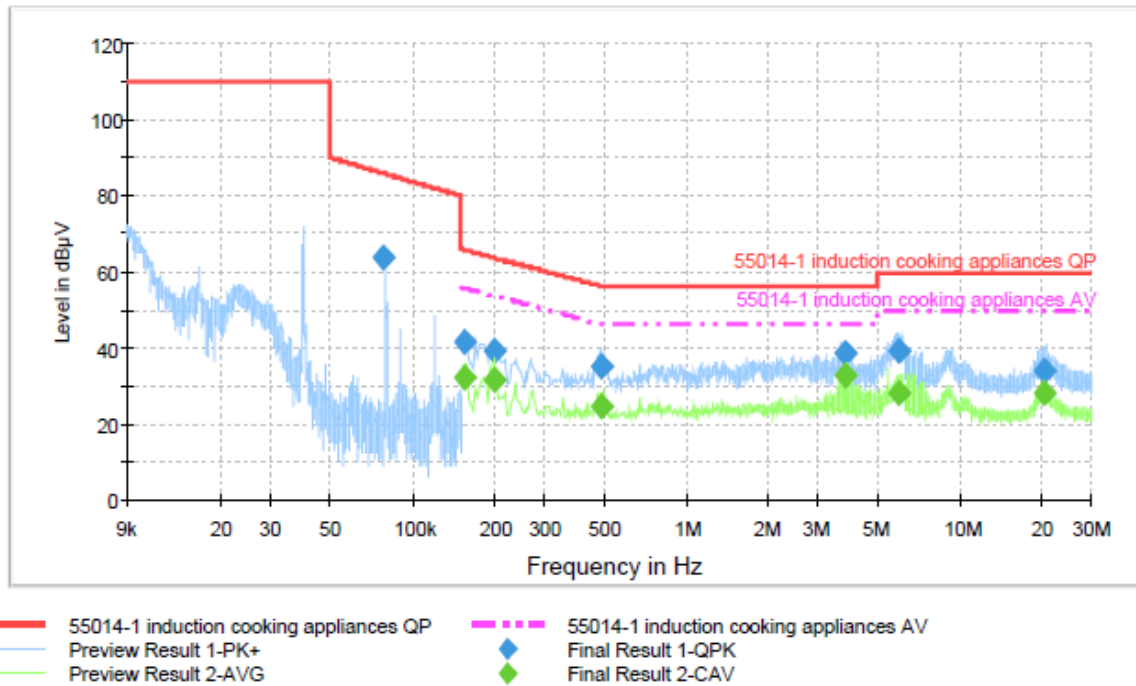
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.075151	67.7	1000.0	0.200	GND	L2	20.1	18.6	86.3	
0.150000	46.7	1000.0	0.200	GND	L2	20.3	33.3	80.0	
0.188555	42.8	1000.0	9.000	GND	L2	20.6	21.3	64.1	
0.260985	38.2	1000.0	9.000	GND	L1	20.7	23.2	61.4	
3.618525	37.6	1000.0	9.000	GND	L1	20.8	18.4	56.0	
5.961481	39.2	1000.0	9.000	GND	L2	20.7	20.8	60.0	
9.107731	35.0	1000.0	9.000	GND	L1	20.8	25.0	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.150000	42.7	1000.0	9.000	GND	L2	20.6	13.3	56.0	
0.188555	39.9	1000.0	9.000	GND	L2	20.6	14.2	54.1	
0.260985	32.6	1000.0	9.000	GND	L1	20.7	18.8	51.4	
3.618525	29.0	1000.0	9.000	GND	L1	20.8	17.0	46.0	
5.961481	29.8	1000.0	9.000	GND	L2	20.7	20.2	50.0	
9.107731	27.8	1000.0	9.000	GND	L1	20.8	22.2	50.0	



Cooking element #5



Final Result 1

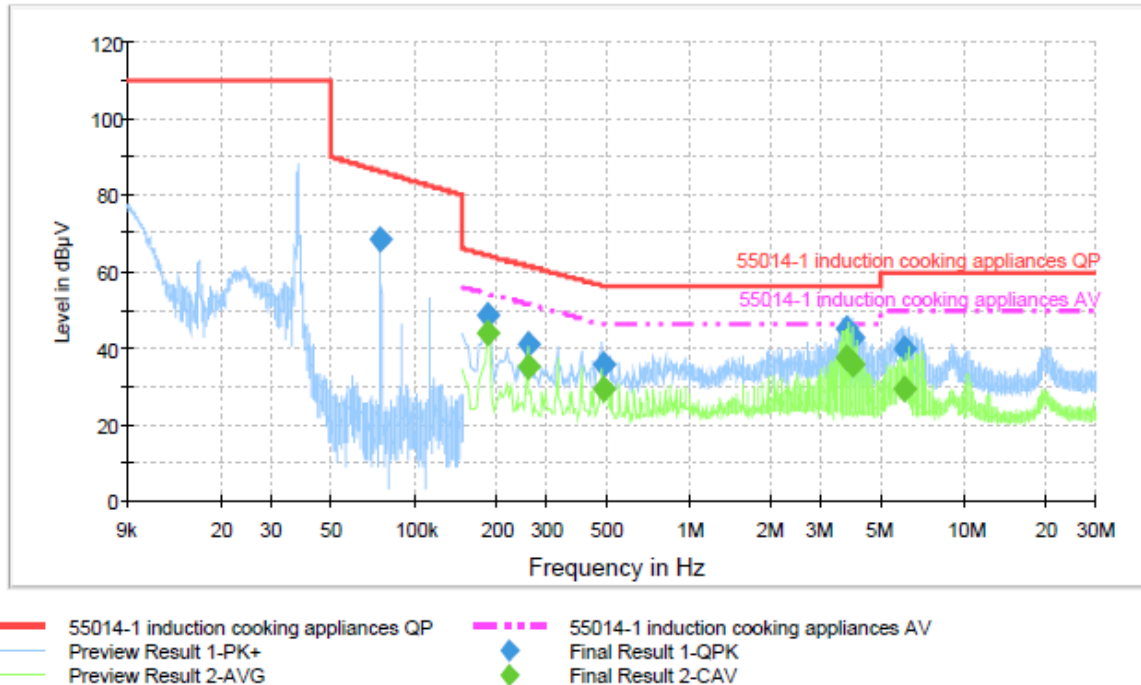
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.078447	63.9	1000.0	0.200	GND	L1	20.2	22.0	85.9	
0.153506	41.6	1000.0	9.000	GND	L1	20.7	24.2	65.8	
0.197858	39.5	1000.0	9.000	GND	L2	20.6	24.2	63.7	
0.484812	35.1	1000.0	9.000	GND	L1	20.7	21.2	56.3	
3.818969	38.4	1000.0	9.000	GND	L1	20.8	17.6	56.0	
5.906588	39.2	1000.0	9.000	GND	L2	20.7	20.8	60.0	
20.093306	34.1	1000.0	9.000	GND	L2	20.9	25.9	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.153506	31.9	1000.0	9.000	GND	L1	20.7	23.9	55.8	
0.197858	31.5	1000.0	9.000	GND	L2	20.6	22.2	53.7	
0.484812	24.7	1000.0	9.000	GND	L1	20.7	21.6	46.3	
3.818969	32.8	1000.0	9.000	GND	L1	20.8	13.2	46.0	
5.906588	28.3	1000.0	9.000	GND	L2	20.7	21.7	50.0	
20.093306	27.8	1000.0	9.000	GND	L2	20.9	22.2	50.0	



AC 240 V / 60 Hz
Cooking element #1



Final Result 1

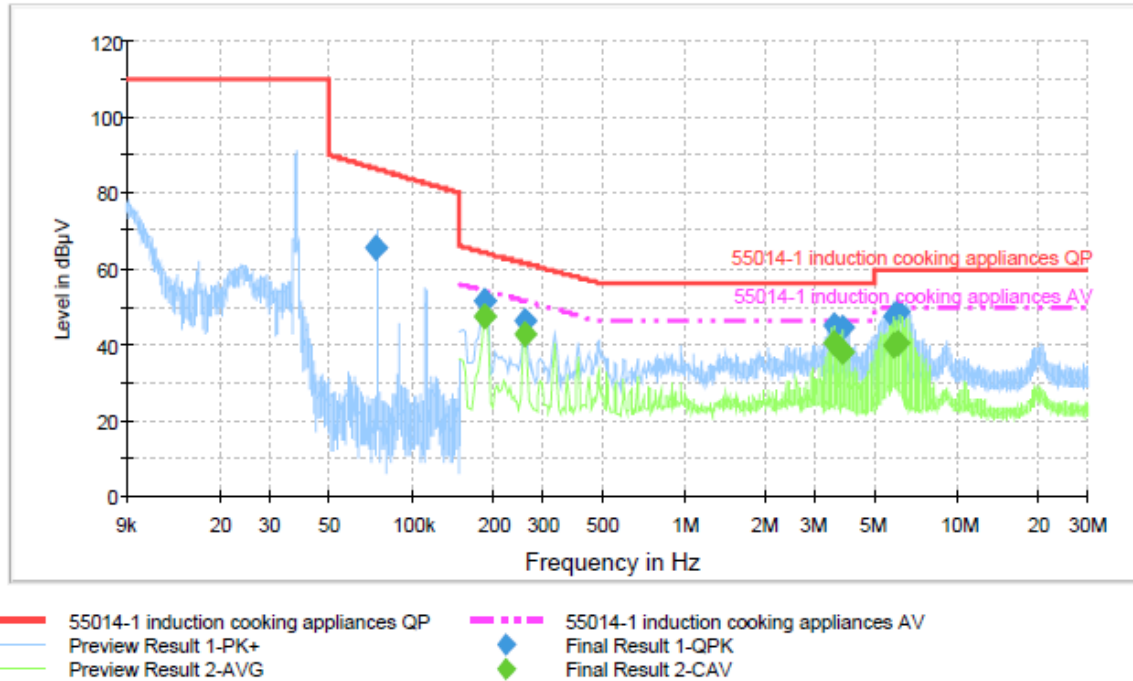
Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.074604	68.7	1000.0	0.200	GND	L1	20.2	17.7	86.4	
0.186000	48.7	1000.0	9.000	GND	L2	20.6	15.5	64.2	
0.257862	41.1	1000.0	9.000	GND	L1	20.7	20.4	61.5	
0.485081	36.0	1000.0	9.000	GND	L2	20.6	20.3	56.3	
3.725119	45.0	1000.0	9.000	GND	L2	20.7	11.0	56.0	
3.910369	42.7	1000.0	9.000	GND	L2	20.7	13.3	56.0	
6.003869	39.6	1000.0	9.000	GND	L1	20.8	20.4	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.186000	43.9	1000.0	9.000	GND	L2	20.6	10.3	54.2	
0.257862	35.2	1000.0	9.000	GND	L1	20.7	16.3	51.5	
0.485081	29.0	1000.0	9.000	GND	L2	20.6	17.3	46.3	
3.725119	37.3	1000.0	9.000	GND	L2	20.7	8.7	46.0	
3.910369	35.8	1000.0	9.000	GND	L2	20.7	10.2	46.0	
6.003869	29.2	1000.0	9.000	GND	L1	20.8	20.8	50.0	



Cooking element #2



Final Result 1

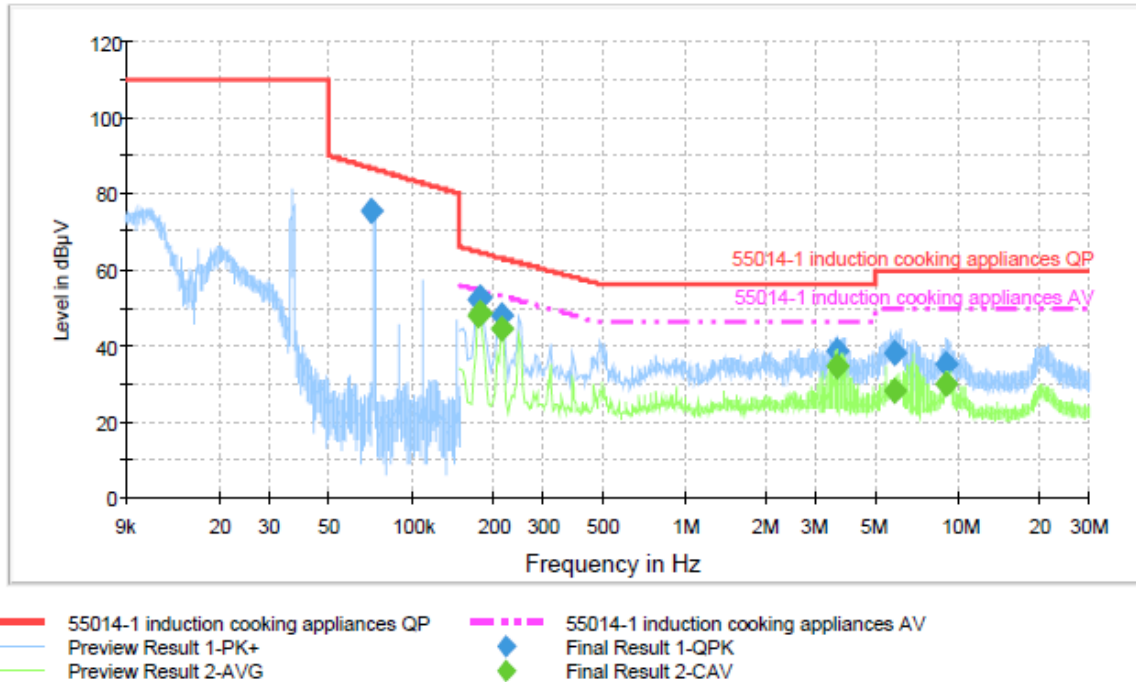
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.073935	65.5	1000.0	0.200	GND	L2	20.1	20.9	86.4	
0.186000	51.6	1000.0	9.000	GND	L2	20.6	12.6	64.2	
0.261206	46.1	1000.0	9.000	GND	L2	20.6	15.3	61.4	
3.551631	45.3	1000.0	9.000	GND	L1	20.7	10.7	56.0	
3.771775	44.6	1000.0	9.000	GND	L1	20.8	11.4	56.0	
5.798650	47.2	1000.0	9.000	GND	L1	20.8	12.8	60.0	
6.096881	48.6	1000.0	9.000	GND	L1	20.8	11.4	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.186000	47.6	1000.0	9.000	GND	L2	20.6	6.6	54.2	
0.261206	42.8	1000.0	9.000	GND	L2	20.6	8.6	51.4	
3.551631	40.4	1000.0	9.000	GND	L1	20.7	5.6	46.0	
3.771775	38.2	1000.0	9.000	GND	L1	20.8	7.8	46.0	
5.798650	39.6	1000.0	9.000	GND	L1	20.8	10.4	50.0	
6.096881	40.5	1000.0	9.000	GND	L1	20.8	9.5	50.0	



Cooking element #3



Final Result 1

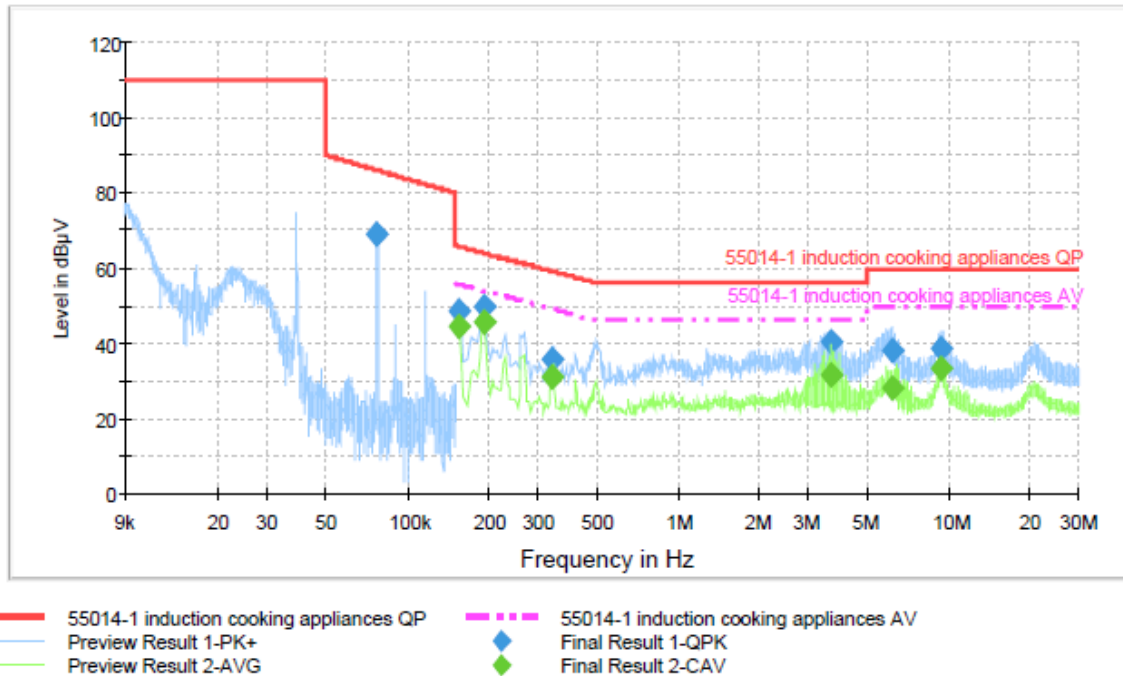
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.071591	75.5	1000.0	0.200	GND	L2	20.1	11.2	86.7	
0.176431	52.3	1000.0	9.000	GND	L2	20.6	12.3	64.7	
0.178000	52.8	1000.0	9.000	GND	L2	20.6	11.8	64.6	
0.214012	48.3	1000.0	9.000	GND	L2	20.6	14.8	63.0	
3.619331	38.6	1000.0	9.000	GND	L2	20.7	17.4	56.0	
5.873544	38.3	1000.0	9.000	GND	L2	20.7	21.7	60.0	
9.043494	35.3	1000.0	9.000	GND	L2	20.7	24.7	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.176431	48.1	1000.0	9.000	GND	L2	20.6	6.6	54.7	
0.178000	48.5	1000.0	9.000	GND	L2	20.6	6.1	54.6	
0.214012	44.4	1000.0	9.000	GND	L2	20.6	8.6	53.0	
3.619331	34.5	1000.0	9.000	GND	L2	20.7	11.5	46.0	
5.873544	28.0	1000.0	9.000	GND	L2	20.7	22.0	50.0	
9.043494	30.0	1000.0	9.000	GND	L2	20.7	20.0	50.0	



Cooking element #4



Final Result 1

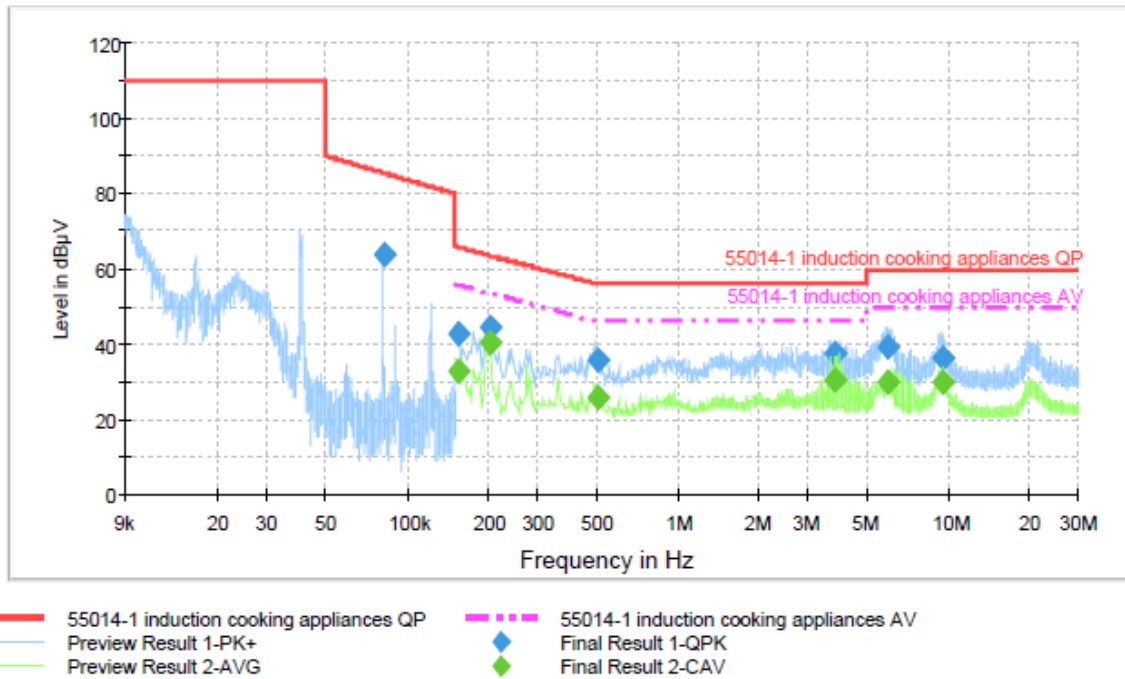
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.076296	69.2	1000.0	0.200	GND	L2	20.1	17.0	86.2	
0.154000	48.6	1000.0	9.000	GND	L1	20.7	17.2	65.8	
0.190839	50.0	1000.0	9.000	GND	L2	20.6	14.0	64.0	
0.343294	35.7	1000.0	9.000	GND	L1	20.7	23.4	59.1	
3.674762	40.4	1000.0	9.000	GND	L1	20.7	15.6	56.0	
6.120044	38.2	1000.0	9.000	GND	L1	20.8	21.8	60.0	
9.318294	38.5	1000.0	9.000	GND	L1	20.8	21.5	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.154000	44.3	1000.0	9.000	GND	L1	20.7	11.5	55.8	
0.190839	45.9	1000.0	9.000	GND	L2	20.6	8.1	54.0	
0.343294	31.2	1000.0	9.000	GND	L1	20.7	17.9	49.1	
3.674762	31.4	1000.0	9.000	GND	L1	20.7	14.6	46.0	
6.120044	27.8	1000.0	9.000	GND	L1	20.8	22.2	50.0	
9.318294	33.2	1000.0	9.000	GND	L1	20.8	16.8	50.0	



Cooking element #5



Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.081733	64.0	1000.0	0.200	GND	L1	20.3	21.5	85.5	
0.154000	42.9	1000.0	9.000	GND	L1	20.7	22.9	65.8	
0.201238	44.3	1000.0	9.000	GND	L2	20.6	19.3	63.6	
0.503738	35.9	1000.0	9.000	GND	L1	20.7	20.1	56.0	
3.776819	37.4	1000.0	9.000	GND	L2	20.7	18.6	56.0	
5.993362	39.3	1000.0	9.000	GND	L1	20.8	20.7	60.0	
9.457931	36.1	1000.0	9.000	GND	L1	20.8	23.9	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.154000	33.0	1000.0	9.000	GND	L1	20.7	22.8	55.8	
0.201238	40.6	1000.0	9.000	GND	L2	20.6	12.9	53.6	
0.503738	25.5	1000.0	9.000	GND	L1	20.7	20.5	46.0	
3.776819	30.5	1000.0	9.000	GND	L2	20.7	15.5	46.0	
5.993362	30.0	1000.0	9.000	GND	L1	20.8	20.0	50.0	
9.457931	29.7	1000.0	9.000	GND	L1	20.8	20.3	50.0	



7. Radiated Emission

7.1 Operating Environment

Temperature : 21.4 °C
Relative Humidity : 61.3 %
Air Pressure : 100.2 kPa

7.2 Test Set-up

The Radiated emission measurements were conducted at the worst test conditions.

The measurements of below 1 GHz were made at 3 m Semi Anechoic Chamber or 10 m Semi Anechoic Chamber (FCC Test Firm Registration No.: 269701) that complies with CISPR 16 / ANSI C63.4.

The frequency range of 9 kHz to 30 MHz, The EUT was placed on a non-conductive turntable approximately 0.8 m above the ground plane. The turntable with EUT was rotated 360° and the receive antenna was fixed 2.0 m on the ground plane.

The frequency range of 30 MHz to 1 000 MHz, The EUT was placed on a non-conductive turntable approximately 0.8 m above the ground plane. The turntable with EUT was rotated 360° and adjusting the receive antenna height from 1.0 m to 4.0 m. All frequencies were investigated in both horizontal and vertical antenna polarity.

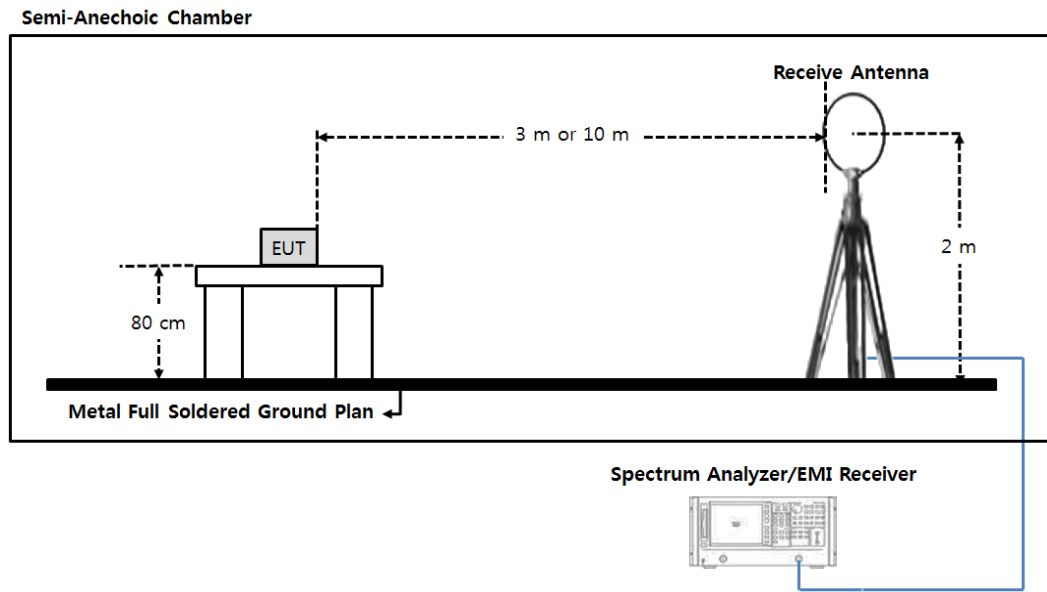


Fig 3. Configurations of Radiated emission test (9 kHz to 30 MHz)

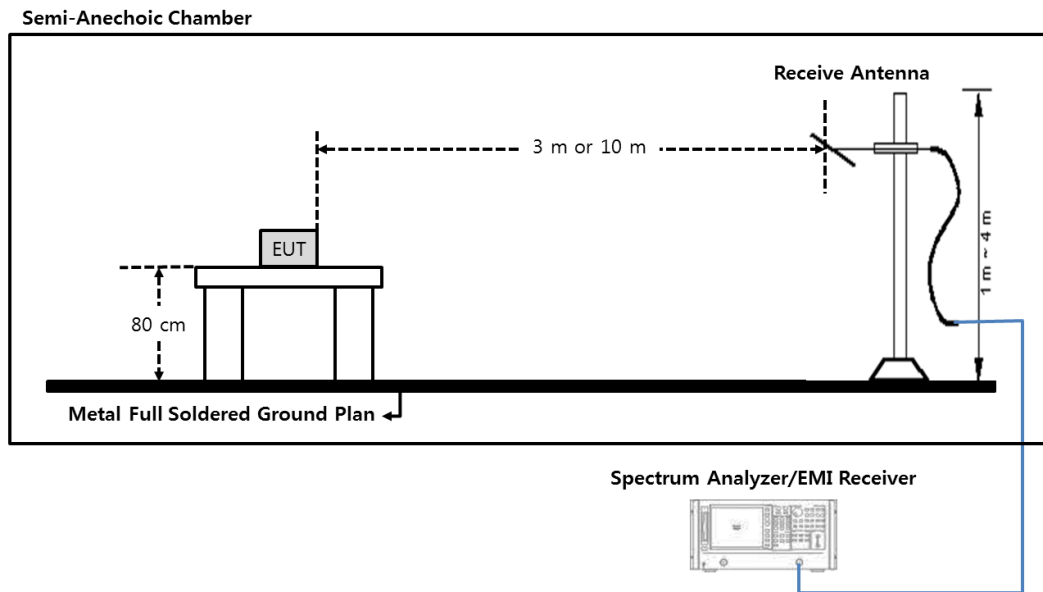


Fig 4. Configurations of Radiated emission test (30 MHz to 1 000 MHz)



7.3 Measurement Uncertainty

The measurement uncertainty was calculated in accordance with ISO “Guide to the expression of uncertainty in measurement”.

The measurement uncertainty was given with a confidence of 95 %.

Test Items(10 m Anechoic Chamber)	Uncertainty	Remark
Radiated emission (30 MHz ~ 300 MHz, 10 m, Vertical)	4.77 dB	Confidence level of approximately 95 % ($k = 2$)
Radiated emission (30 MHz ~ 300 MHz, 10 m, Horizontal)	4.79 dB	Confidence level of approximately 95 % ($k = 2$)
Radiated emission (300 MHz ~ 1 000 MHz, 10 m, Vertical)	4.91 dB	Confidence level of approximately 95 % ($k = 2$)
Radiated emission (300 MHz ~ 1 000 MHz, 10 m, Horizontal)	4.90 dB	Confidence level of approximately 95 % ($k = 2$)
Radiated emission (1 000 MHz ~ 6 000 MHz, 3 m)	4.64 dB	Confidence level of approximately 95 % ($k = 2$)
Test items (3 m Anechoic Chamber)	Uncertainty	Remark
Radiated emission (30 MHz ~ 300 MHz, 3 m, Vertical)	4.90 dB	Confidence level of approximately 95 % ($k = 2$)
Radiated emission (30 MHz ~ 300 MHz, 3 m, Horizontal)	4.79 dB	Confidence level of approximately 95 % ($k = 2$)
Radiated emission (300 MHz ~ 1 000 MHz, 3 m, Vertical)	6.23 dB	Confidence level of approximately 95 % ($k = 2$)
Radiated emission (300 MHz ~ 1 000 MHz, 3 m, Horizontal)	5.16 dB	Confidence level of approximately 95 % ($k = 2$)
Radiated emission (1 GHz ~ 6 GHz, 3 m)	4.56 dB	Confidence level of approximately 95 % ($k = 2$)
Radiated emission (6 GHz ~ 18 GHz, 3 m)	4.89 dB	Confidence level of approximately 95 % ($k = 2$)
Radiated emission (18 GHz ~ 26 GHz, 3 m)	5.16 dB	Confidence level of approximately 95 % ($k = 2$)

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the EUT as specified in CISPR 16-4-2.

The listed uncertainties are the worst case uncertainty for the entire range of measurement. please note that the uncertainty values are provided for informational purposes only are not used in determining the PASS/FAIL results



7.4 Limit

Equipment	Operating frequency	RF Power generated by equipment (watts)	Field strength limit (uV/m)	Distance (meters)
Any type unless otherwise specified (miscellaneous)	Any ISM frequency	Below 500 500 or more	25 $25 \times \text{SQRT}(\text{power}/500)$	300 ¹ 300
	Any non-ISM frequency	Below 500 500 or more	15 $15 \times \text{SQRT}(\text{power}/500)$	300 ¹ 300
Industrial heaters and RF stabilized arc welders	On or below 5,725 MHz Above 5,725 MHz	Any Any	10 (²)	1,600 (²)
Medical diathermy	Any ISM frequency Any non-ISM frequency	Any Any	25 15	300 300
Ultrasonic	Below 490 kHz	Below 500 500 or more	$2,400/\text{F}(\text{kHz})$ $2,400/\text{F}(\text{kHz}) \times \text{SQRT}(\text{power}/500)$	300 ³ 300
	490 to 1,600 kHz Above 1,600 kHz	Any Any	$24,000/\text{F}(\text{kHz})$ 15	30 30
Induction cooking ranges	Below 90 kHz On or above 90 kHz	Any Any	1,500 300	⁴ 30 ⁴ 30

Note.

- 1) Field strength may not exceed 10 $\mu\text{V}/\text{m}$ at 1600 meters. Consumer equipment operating below 1000 MHz is not permitted the increase in field strength otherwise permitted here for power over 500 watts.
- 2) Reduced to the greatest extent possible.
- 3) Field strength may not exceed 10 $\mu\text{V}/\text{m}$ at 1600 meters. Consumer equipment is not permitted the increase in field strength otherwise permitted here for over 500 watts.
- 4) Induction cooking ranges manufactured prior to February 1, 1980, shall be subject to the field strength limits for miscellaneous ISM equipment.

7.5 Test Equipment used

Model Name	Manufacturer	Description	Serial Number	Calibration Date
■ - ESR7	Rohde & Schwarz	EMI Test Receiver	101382	Apr. 03, 2024
■ - HFH2-Z2	Rohde & Schwarz	Loop ANT	100041	Apr. 15, 2024
■ - CO3000	Innco system GmbH	Position Controller	CO3000/779/330 50314/L	N/A
■ - DT3000	Innco system GmbH	Turntable	1280314	N/A
□ - MA4000-EP	Innco system GmbH	Antenna Mast	4420314	N/A
□ - MA4640-XP-ET	Innco system GmbH	Antenna Mast	MA4640/558	N/A
■ - EMC 32	Rohde & Schwarz	Software	Ver.10.60.20	N/A

All test equipment used is calibrated on a regular basis.

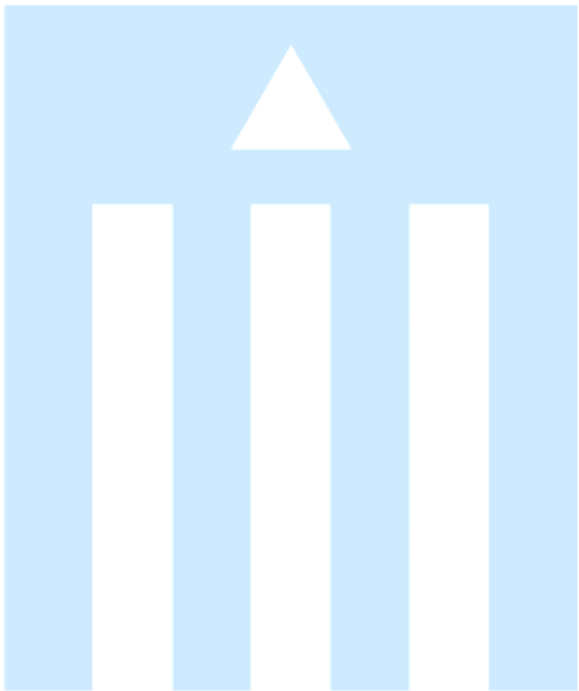


7.6 Test data for Radiated Emission

- Test Date : Oct. 05, 2024
- Measurement Distance : 10 m
- Note : frequency range to be scanned up to 30 MHz, because the frequency band in which the EUT operates less than 1.705 MHz

-. Measurement setting

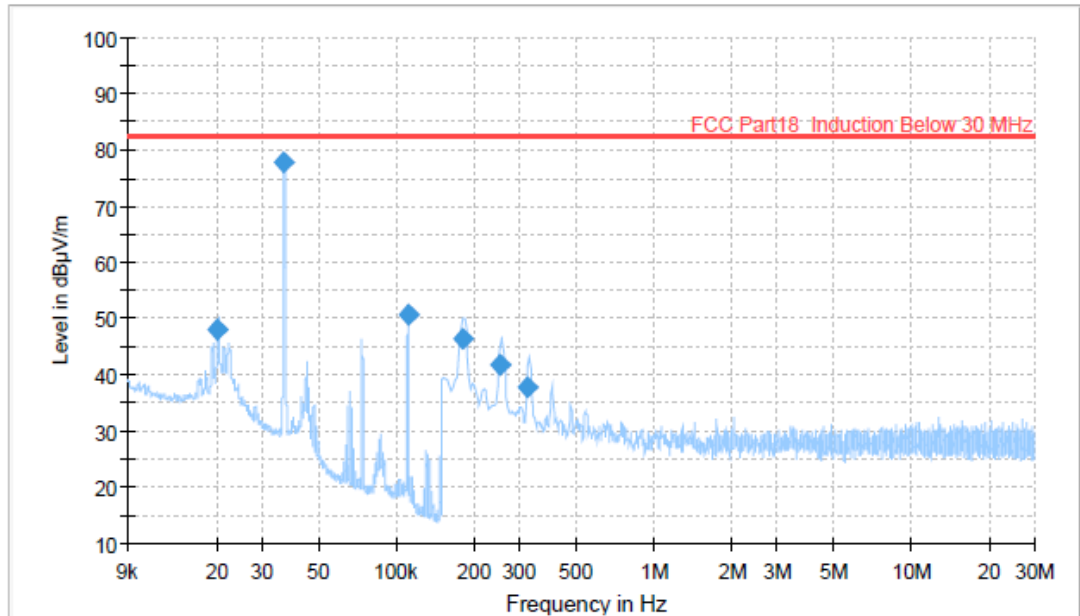
Frequency range	9 kHz ~ 150 kHz	0.15 MHz ~ 30 MHz
Detector mode	Average	Average
Resolution bandwidth	200 Hz	9 kHz





-. **Measurement Data:** Induction mode with WLAN
[AC 208V, 60 Hz]

Cooking Element #1_H



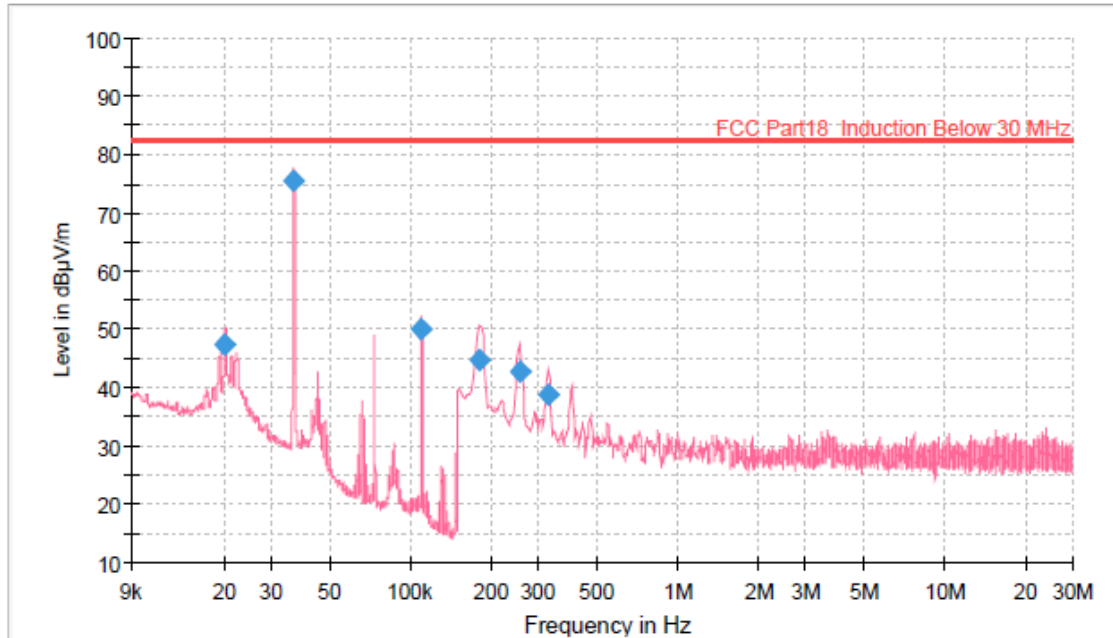
— Preview Result 1H-AVG — FCC Part18_Induction Below 30 MHz ◆ Final_Result AVC

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020056	48.04	82.60	34.56	1000.0	0.200	H	40.0	20.3
0.036526	77.79	82.60	4.81	1000.0	0.200	H	64.0	20.1
0.110782	50.79	82.60	31.81	1000.0	0.200	H	69.0	20.0
0.182000	46.46	82.60	36.14	1000.0	9.000	H	44.0	20.0
0.253475	41.85	82.60	40.75	1000.0	9.000	H	37.0	20.0
0.324100	37.64	82.60	44.96	1000.0	9.000	H	37.0	20.0



Cooking Element #1_V



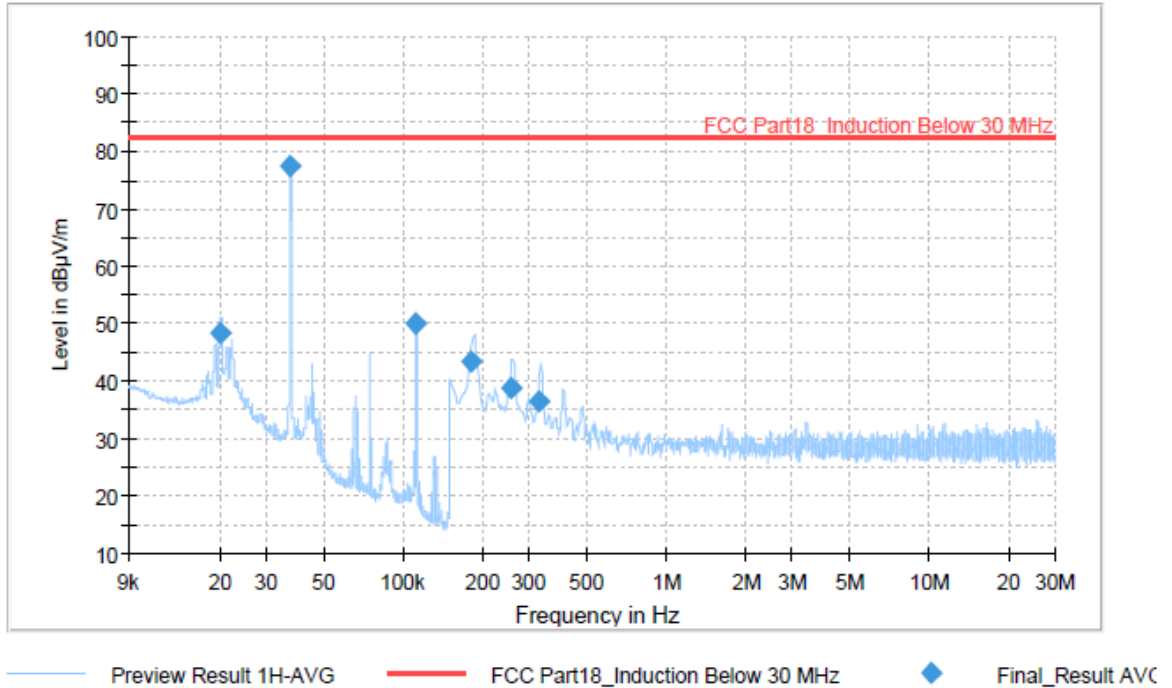
Preview Result 1V-AVG FCC Part18_Induction Below 30 MHz Final_Result AVG

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020136	47.28	82.60	35.32	1000.0	0.200	V	284.0	20.3
0.036248	75.47	82.60	7.13	1000.0	0.200	V	130.0	20.1
0.108815	50.08	82.60	32.52	1000.0	0.200	V	134.0	20.0
0.182000	44.72	82.60	37.88	1000.0	9.000	V	358.0	20.0
0.254475	42.73	82.60	39.87	1000.0	9.000	V	358.0	20.0
0.329100	38.94	82.60	43.66	1000.0	9.000	V	358.0	20.0



Cooking Element #2_H

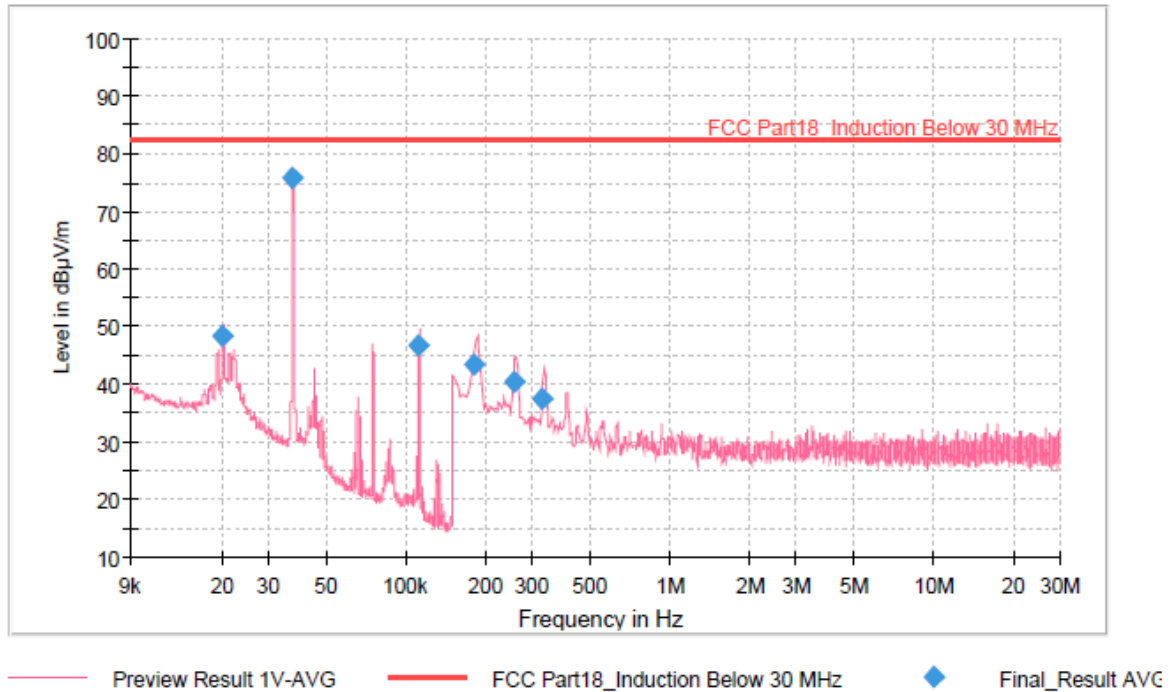


Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020146	48.38	82.60	34.22	1000.0	0.200	H	185.0	20.3
0.037099	77.35	82.60	5.25	1000.0	0.200	H	67.0	20.1
0.110860	50.10	82.60	32.50	1000.0	0.200	H	97.0	20.0
0.182000	43.58	82.60	39.02	1000.0	9.000	H	71.0	20.0
0.255445	38.81	82.60	43.79	1000.0	9.000	H	22.0	20.0
0.330070	36.32	82.60	46.28	1000.0	9.000	H	34.0	20.0



Cooking Element #2_V

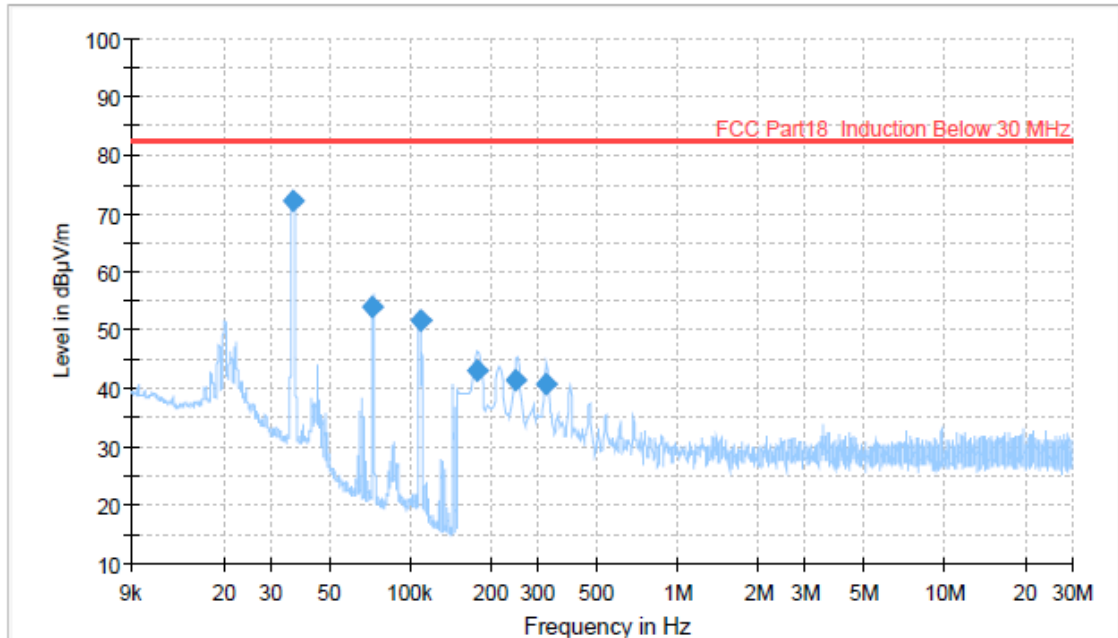


Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020108	48.24	82.60	34.36	1000.0	0.200	V	308.0	20.3
0.036717	75.70	82.60	6.90	1000.0	0.200	V	153.0	20.1
0.111264	46.76	82.60	35.84	1000.0	0.200	V	153.0	20.0
0.182000	43.39	82.60	39.21	1000.0	9.000	V	134.0	20.0
0.256460	40.48	82.60	42.12	1000.0	9.000	V	129.0	20.0
0.330070	37.36	82.60	45.24	1000.0	9.000	V	141.0	20.0



Cooking Element #3_H



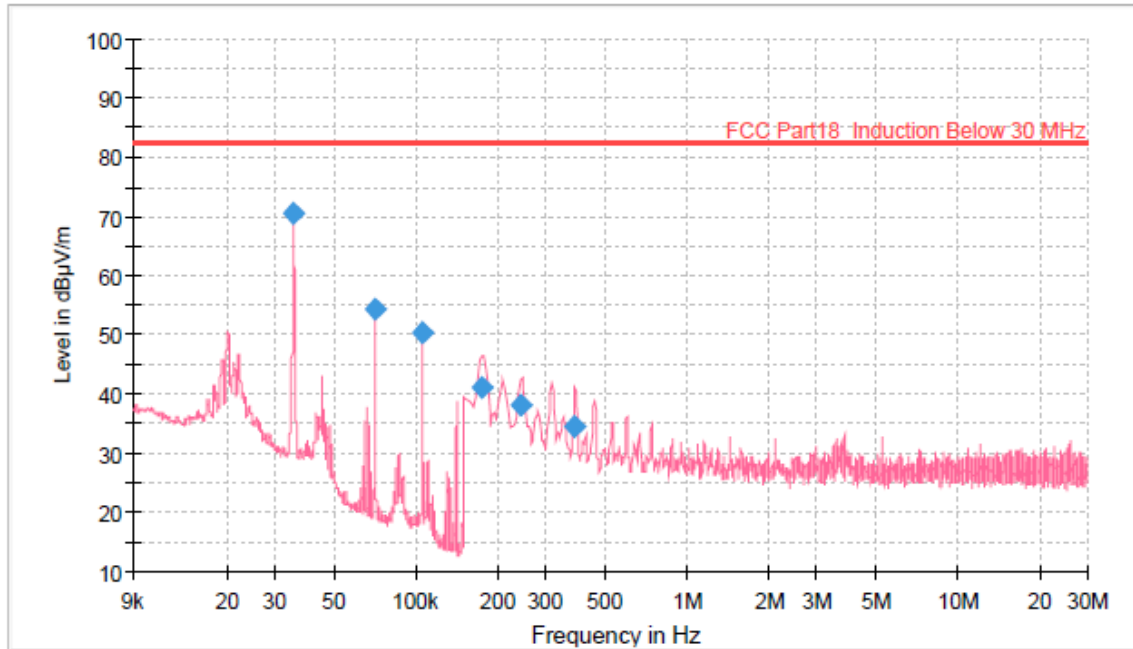
Preview Result 1H-AVG FCC Part18_Induction Below 30 MHz Final_Result AVC

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.036439	72.05	82.60	10.55	1000.0	0.200	H	188.0	20.1
0.071577	54.06	82.60	28.54	1000.0	0.200	H	115.0	20.0
0.109786	51.61	82.60	30.99	1000.0	0.200	H	136.0	20.0
0.178000	43.19	82.60	39.41	1000.0	9.000	H	104.0	20.0
0.246490	41.43	82.60	41.17	1000.0	9.000	H	136.0	20.0
0.322130	40.93	82.60	41.67	1000.0	9.000	H	124.0	20.0



Cooking Element #3_V



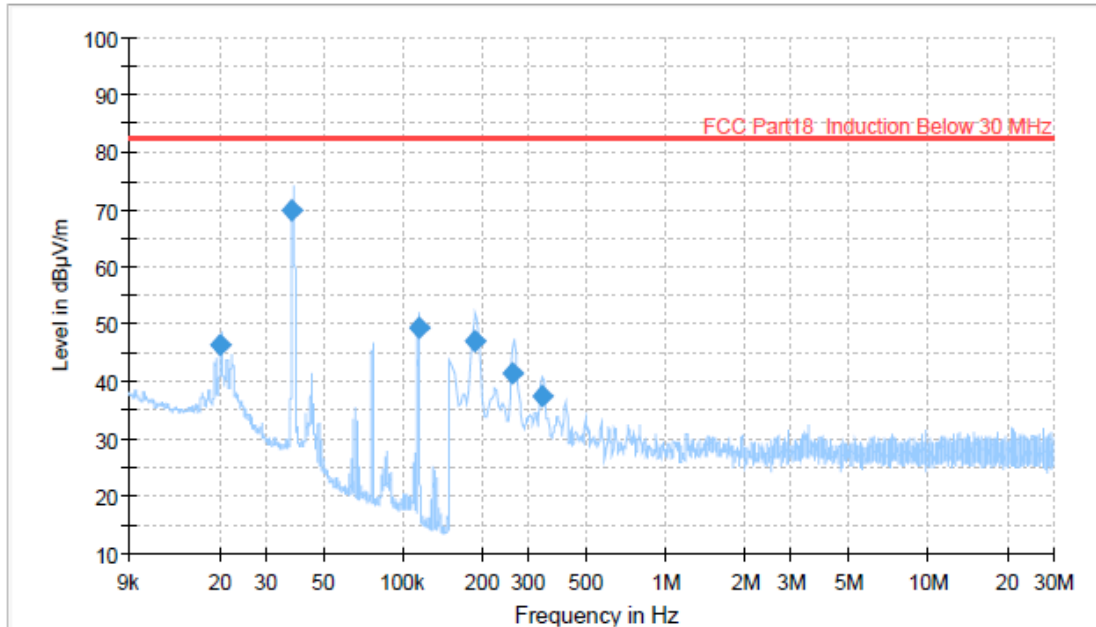
Preview Result 1V-AVG FCC Part18_Induction Below 30 MHz Final_Result AVC

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.035092	70.43	82.60	12.17	1000.0	0.200	V	150.0	20.1
0.070126	54.24	82.60	28.36	1000.0	0.200	V	24.0	20.0
0.105187	50.53	82.60	32.07	1000.0	0.200	V	179.0	20.0
0.174000	41.16	82.60	41.44	1000.0	9.000	V	0.0	20.0
0.244520	38.19	82.60	44.41	1000.0	9.000	V	220.0	20.0
0.384815	34.45	82.60	48.15	1000.0	9.000	V	0.0	20.0



Cooking Element #4_H



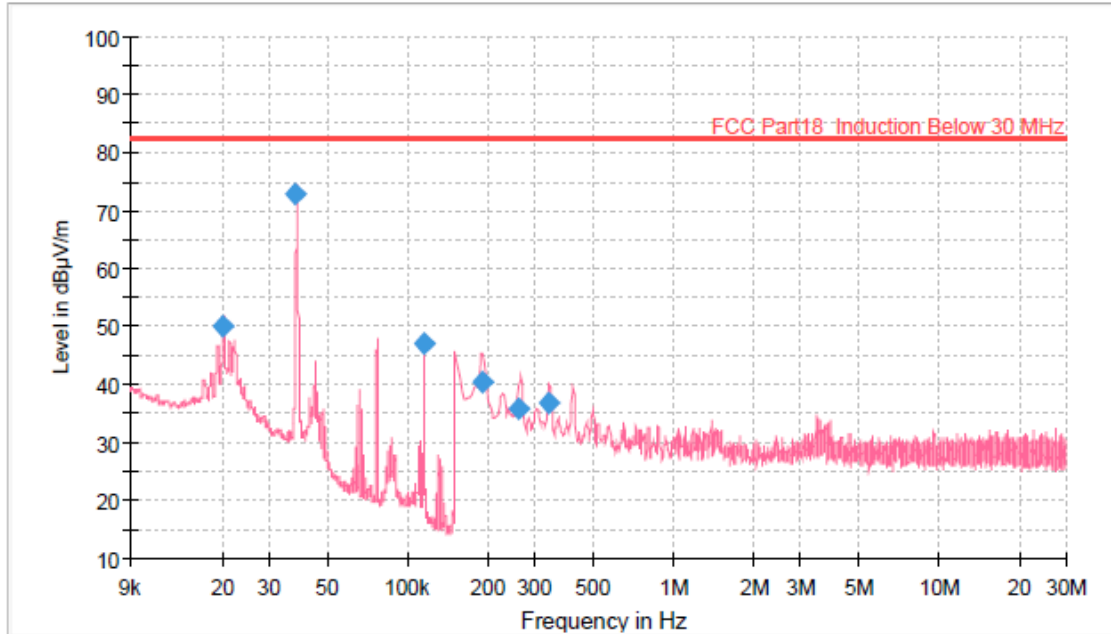
Preview Result 1H-AVG FCC Part18_Induction Below 30 MHz Final_Result AVC

Final Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020122	46.30	82.60	36.30	1000.0	0.200	H	247.0	20.3
0.037469	69.76	82.60	12.84	1000.0	0.200	H	206.0	20.1
0.114851	49.46	82.60	33.14	1000.0	0.200	H	201.0	20.0
0.186000	46.99	82.60	35.61	1000.0	9.000	H	221.0	20.0
0.261415	41.32	82.60	41.28	1000.0	9.000	H	197.0	20.0
0.337055	37.33	82.60	45.27	1000.0	9.000	H	197.0	20.0



Cooking Element #4_V



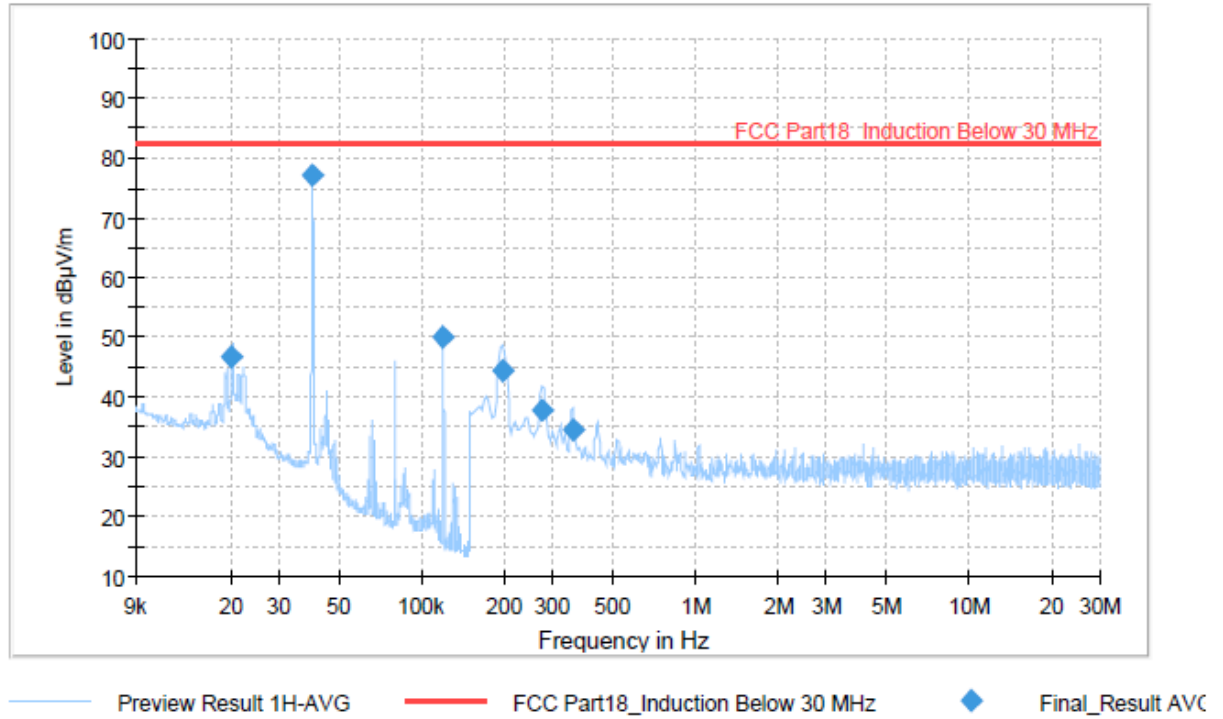
Preview Result 1V-AVG FCC Part18_Induction Below 30 MHz Final_Result AVC

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020108	50.15	82.60	32.45	1000.0	0.200	V	0.0	20.3
0.037587	73.01	82.60	9.59	1000.0	0.200	V	95.0	20.1
0.114781	47.01	82.60	35.59	1000.0	0.200	V	95.0	20.0
0.190000	40.28	82.60	42.32	1000.0	9.000	V	66.0	20.0
0.261415	35.78	82.60	46.82	1000.0	9.000	V	142.0	20.0
0.341040	36.74	82.60	45.86	1000.0	9.000	V	304.0	20.0



Cooking Element #5_H

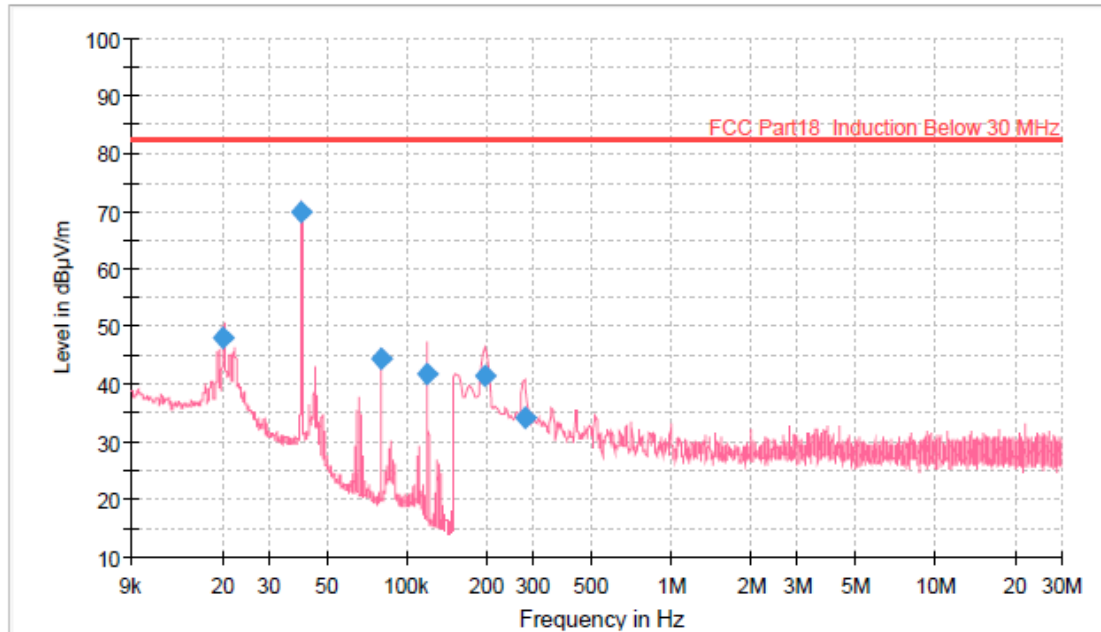


Final Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020122	46.64	82.60	35.96	1000.0	0.200	H	161.0	20.3
0.039420	77.22	82.60	5.38	1000.0	0.200	H	174.0	20.1
0.118615	50.20	82.60	32.40	1000.0	0.200	H	149.0	20.0
0.196760	44.42	82.60	38.18	1000.0	9.000	H	182.0	20.0
0.275370	37.94	82.60	44.66	1000.0	9.000	H	191.0	20.0
0.355965	34.51	82.60	48.09	1000.0	9.000	H	145.0	20.0



Cooking Element #5_V



Preview Result 1V-AVG FCC Part18_Induction Below 30 MHz Final_Result AVC

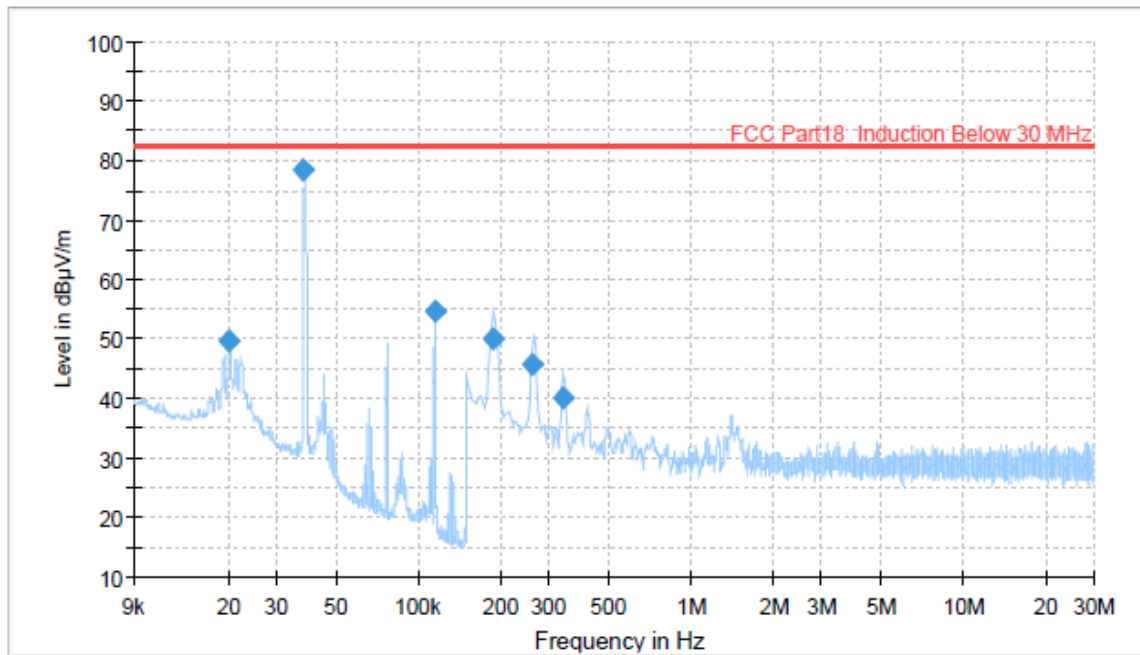
Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020056	48.05	82.60	34.55	1000.0	0.200	V	230.0	20.3
0.039613	69.96	82.60	12.64	1000.0	0.200	V	78.0	20.1
0.079300	44.29	82.60	38.31	1000.0	0.200	V	33.0	20.0
0.118671	41.60	82.60	41.00	1000.0	0.200	V	78.0	20.0
0.196760	41.35	82.60	41.25	1000.0	9.000	V	117.0	20.0
0.277355	34.09	82.60	48.51	1000.0	9.000	V	142.0	20.0



[AC 240V, 60 Hz]

Cooking Element #1_H



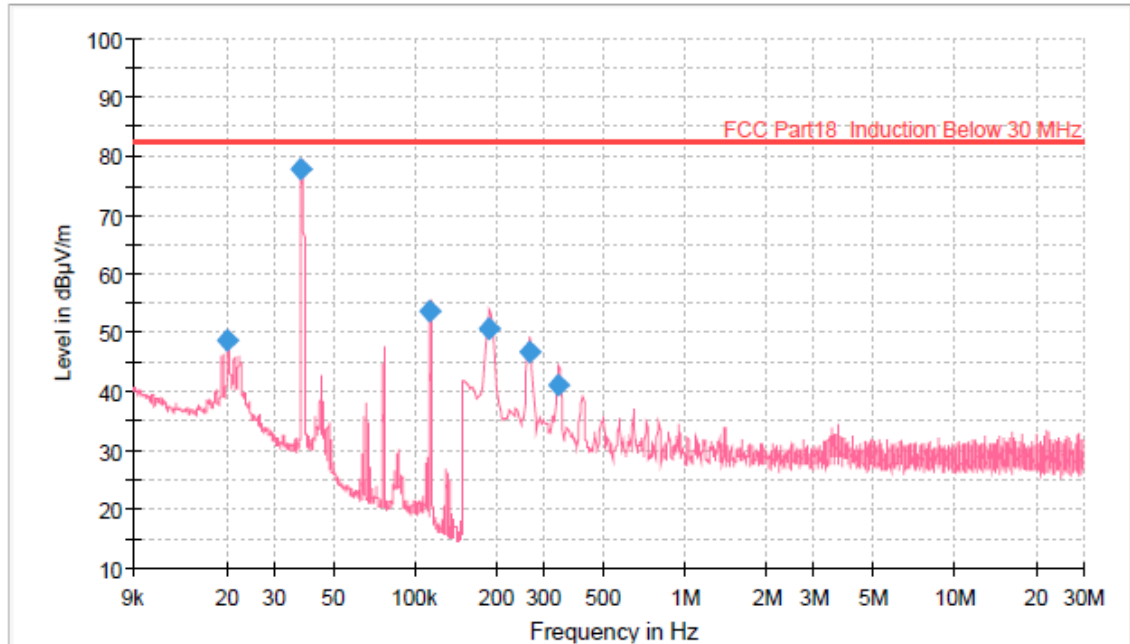
Preview Result 1H-AVG FCC Part18_Induction Below 30 MHz Final_Result AVC

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020136	49.85	82.60	32.75	1000.0	0.200	H	182.0	20.3
0.037926	78.52	82.60	4.08	1000.0	0.200	H	50.0	20.1
0.114809	54.81	82.60	27.79	1000.0	0.200	H	54.0	20.0
0.186000	49.99	82.60	32.61	1000.0	9.000	H	60.0	20.0
0.262430	45.70	82.60	36.90	1000.0	9.000	H	60.0	20.0
0.336040	40.14	82.60	42.46	1000.0	9.000	H	60.0	20.0



Cooking Element #1_V



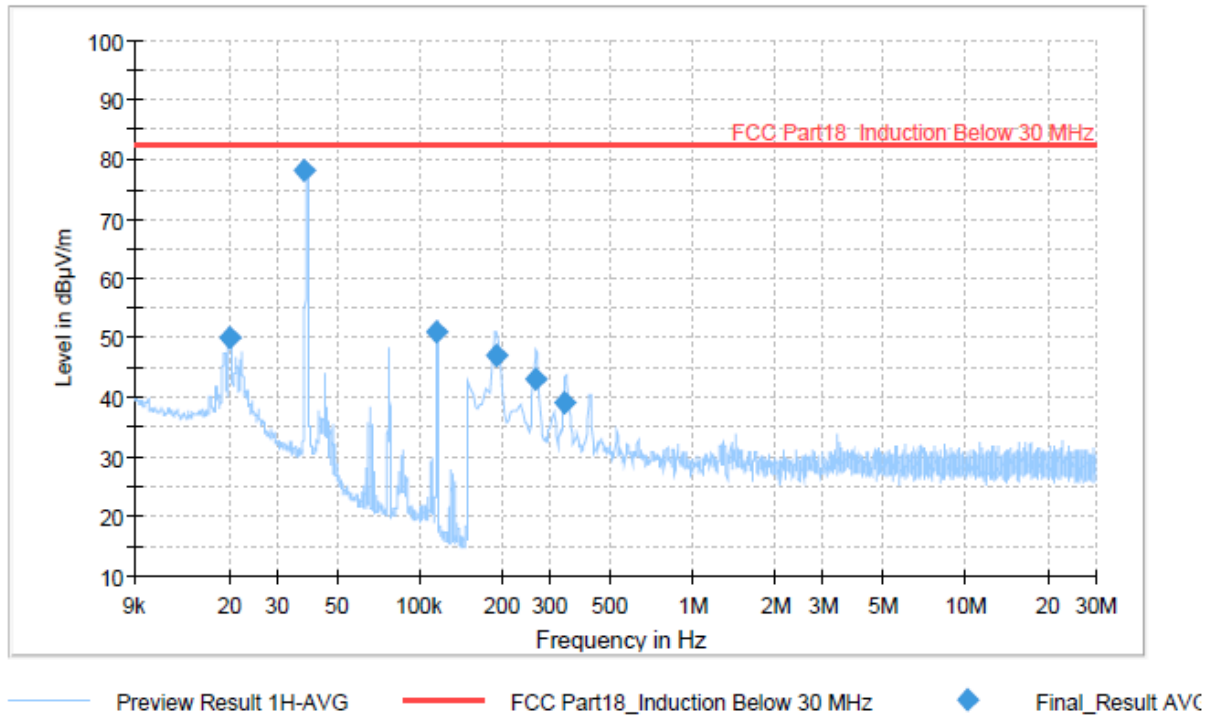
— Preview Result 1V-AVG — FCC Part18_Induction Below 30 MHz ◆ Final_Result AVG

Final Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020188	48.88	82.60	33.72	1000.0	0.200	V	190.0	20.3
0.037488	77.99	82.60	4.61	1000.0	0.200	V	148.0	20.1
0.113816	53.54	82.60	29.06	1000.0	0.200	V	0.0	20.0
0.186000	50.58	82.60	32.02	1000.0	9.000	V	335.0	20.0
0.266415	46.64	82.60	35.96	1000.0	9.000	V	335.0	20.0
0.341040	41.08	82.60	41.52	1000.0	9.000	V	335.0	20.0



Cooking Element #2_H

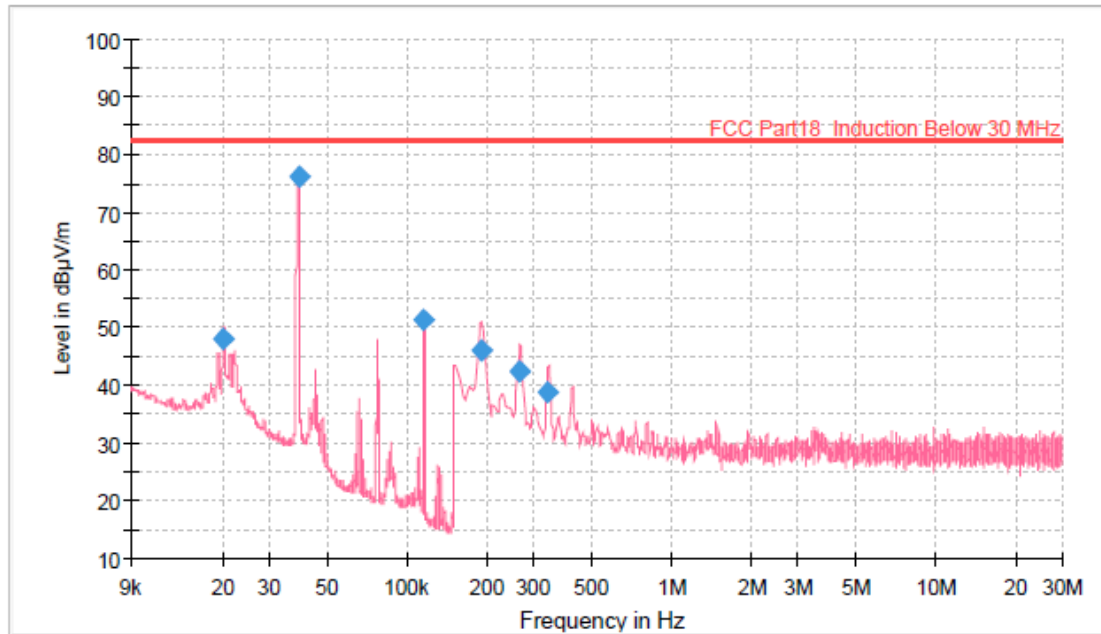


Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020010	49.99	82.60	32.61	1000.0	0.200	H	272.0	20.3
0.037690	78.20	82.60	4.40	1000.0	0.200	H	78.0	20.1
0.115014	51.07	82.60	31.53	1000.0	0.200	H	25.0	20.0
0.190000	47.08	82.60	35.52	1000.0	9.000	H	44.0	20.0
0.265415	42.93	82.60	39.67	1000.0	9.000	H	44.0	20.0
0.339025	39.13	82.60	43.47	1000.0	9.000	H	44.0	20.0



Cooking Element #2_V



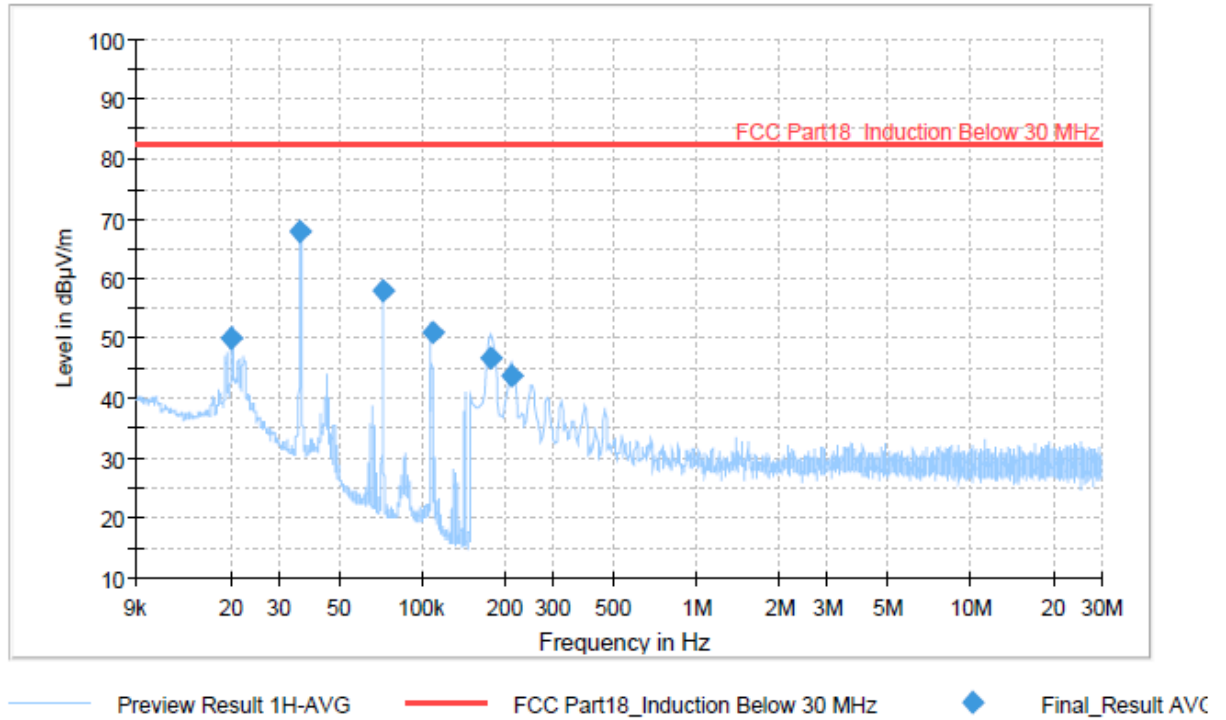
— Preview Result 1V-AVG — FCC Part18_Induction Below 30 MHz ◆ Final_Result AVC

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020056	47.98	82.60	34.62	1000.0	0.200	V	119.0	20.3
0.039092	76.26	82.60	6.34	1000.0	0.200	V	156.0	20.1
0.114948	51.37	82.60	31.23	1000.0	0.200	V	119.0	20.0
0.190000	46.14	82.60	36.46	1000.0	9.000	V	119.0	20.0
0.265415	42.38	82.60	40.22	1000.0	9.000	V	119.0	20.0
0.339025	38.94	82.60	43.66	1000.0	9.000	V	119.0	20.0



Cooking Element #3_H

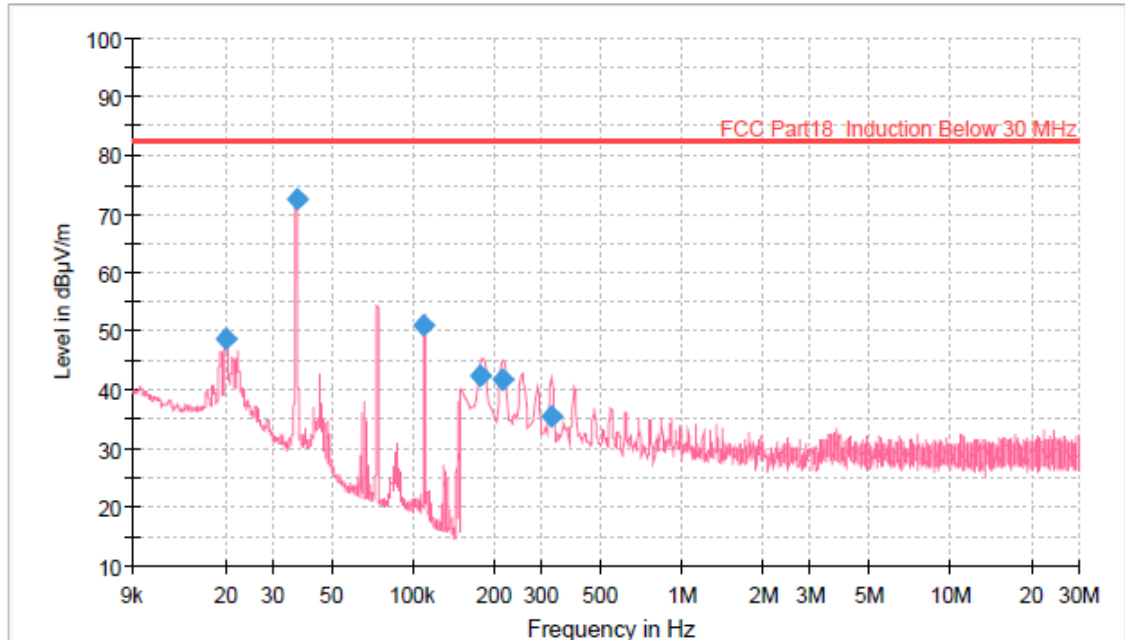


Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020150	50.08	82.60	32.52	1000.0	0.200	H	146.0	20.3
0.035773	67.87	82.60	14.73	1000.0	0.200	H	92.0	20.1
0.071230	58.09	82.60	24.51	1000.0	0.200	H	124.0	20.0
0.108248	50.97	82.60	31.63	1000.0	0.200	H	117.0	20.0
0.176865	46.62	82.60	35.98	1000.0	9.000	H	157.0	20.0
0.212685	43.67	82.60	38.93	1000.0	9.000	H	113.0	20.0



Cooking Element #3_V



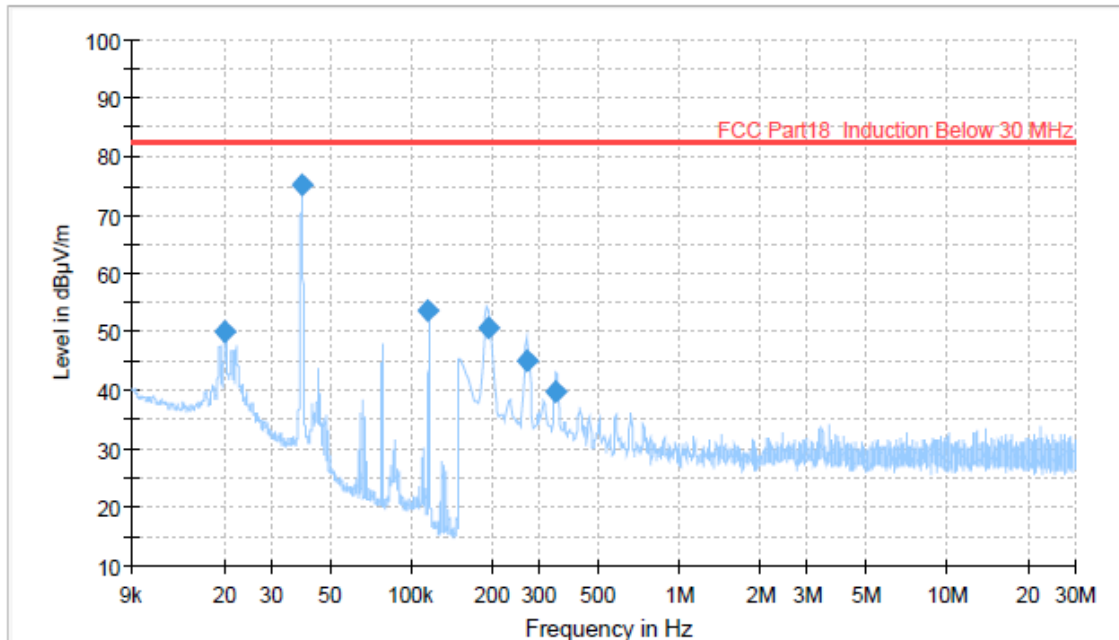
— Preview Result 1V-AVG — FCC Part18_Induction Below 30 MHz ◆ Final_Result AVG

Final Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020038	48.83	82.60	33.77	1000.0	0.200	V	241.0	20.3
0.036849	72.48	82.60	10.12	1000.0	0.200	V	94.0	20.1
0.109817	51.12	82.60	31.48	1000.0	0.200	V	241.0	20.0
0.177655	42.50	82.60	40.10	1000.0	9.000	V	73.0	20.0
0.215670	41.77	82.60	40.83	1000.0	9.000	V	5.0	20.0
0.329100	35.58	82.60	47.02	1000.0	9.000	V	281.0	20.0



Cooking Element #4_H



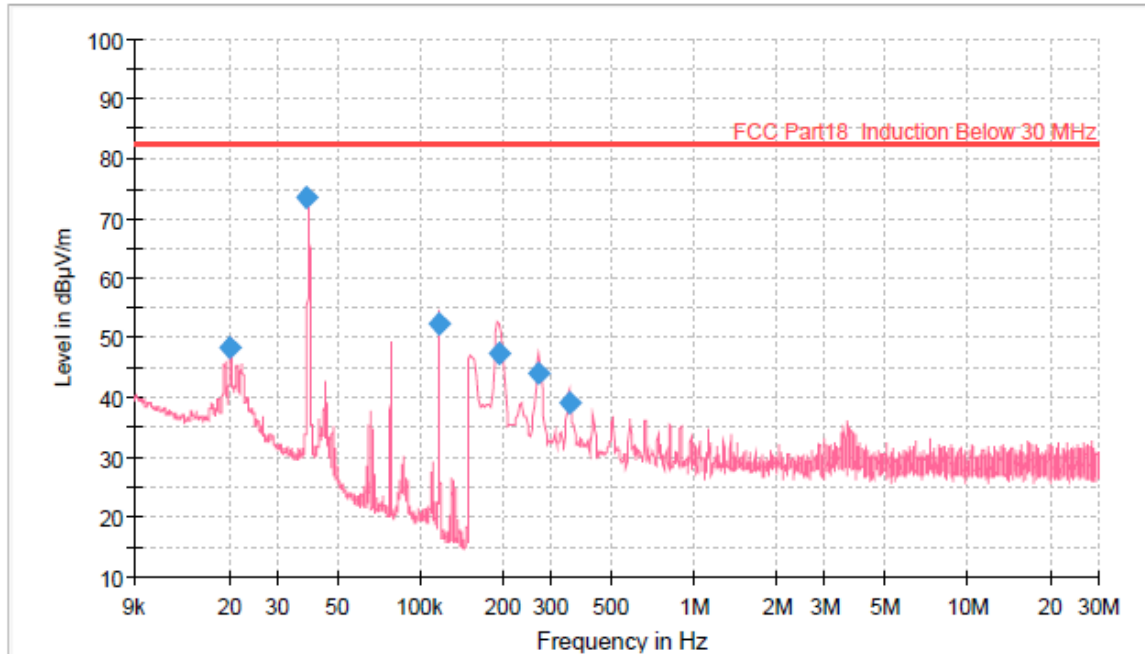
— Preview Result 1H-AVG — FCC Part18_Induction Below 30 MHz ◆ Final_Result AVC

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020146	50.02	82.60	32.58	1000.0	0.200	H	0.0	20.3
0.039200	75.12	82.60	7.48	1000.0	0.200	H	233.0	20.1
0.115893	53.55	82.60	29.05	1000.0	0.200	H	167.0	20.0
0.194000	50.64	82.60	31.96	1000.0	9.000	H	208.0	20.0
0.268400	45.06	82.60	37.54	1000.0	9.000	H	208.0	20.0
0.347010	39.83	82.60	42.77	1000.0	9.000	H	208.0	20.0



Cooking Element #4_V



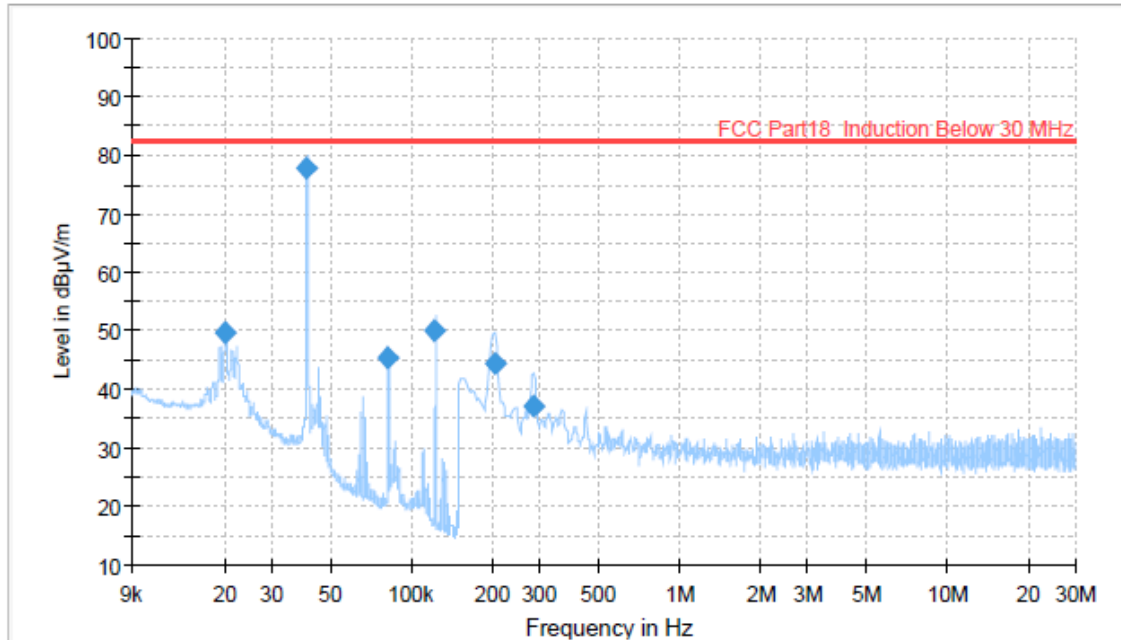
Preview Result 1V-AVG FCC Part18_Induction Below 30 MHz Final_Result AVC

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020056	48.32	82.60	34.28	1000.0	0.200	V	313.0	20.3
0.038499	73.49	82.60	9.11	1000.0	0.200	V	122.0	20.1
0.116142	52.27	82.60	30.33	1000.0	0.200	V	122.0	20.0
0.194000	47.36	82.60	35.24	1000.0	9.000	V	126.0	20.0
0.269400	44.11	82.60	38.49	1000.0	9.000	V	126.0	20.0
0.349995	39.13	82.60	43.47	1000.0	9.000	V	0.0	20.0



Cooking Element #5_H



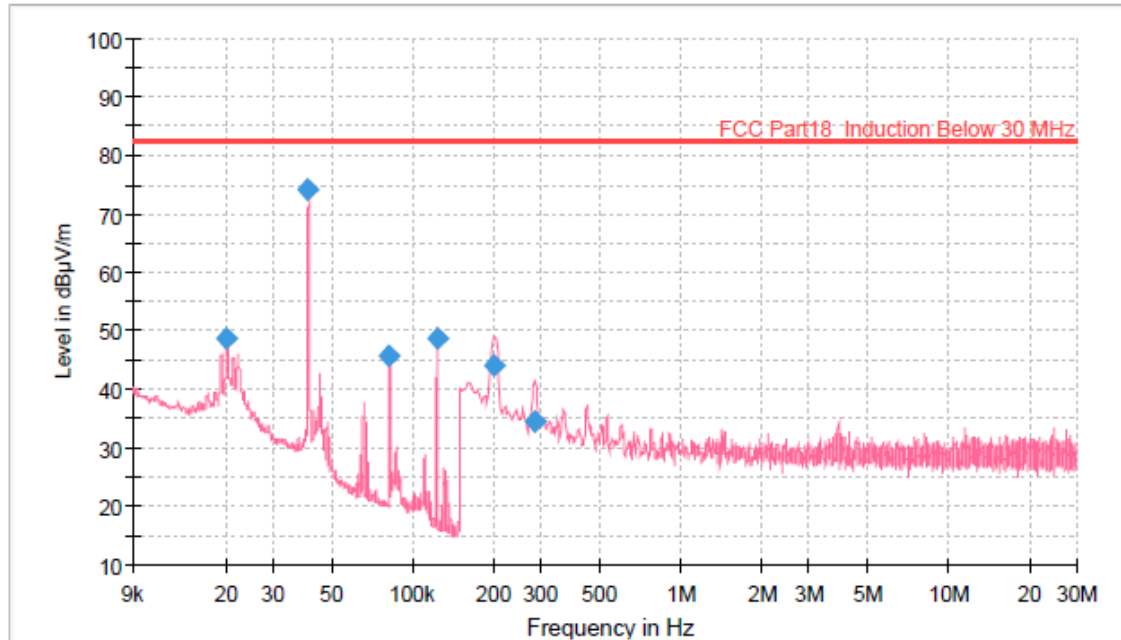
— Preview Result 1H-AVG — FCC Part18_Induction Below 30 MHz ◆ Final_Result AVC

Final Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020066	49.81	82.60	32.79	1000.0	0.200	H	167.0	20.3
0.040384	77.70	82.60	4.90	1000.0	0.200	H	180.0	20.1
0.081095	45.29	82.60	37.31	1000.0	0.200	H	130.0	20.0
0.121434	50.07	82.60	32.53	1000.0	0.200	H	167.0	20.0
0.203730	44.45	82.60	38.15	1000.0	9.000	H	207.0	20.0
0.284325	37.23	82.60	45.37	1000.0	9.000	H	214.0	20.0



Cooking Element #5_V



Preview Result 1V-AVG FCC Part18_Induction Below 30 MHz Final_Result AVC

Final Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020146	48.66	82.60	33.94	1000.0	0.200	V	32.0	20.3
0.040398	74.11	82.60	8.49	1000.0	0.200	V	74.0	20.1
0.080794	45.88	82.60	36.72	1000.0	0.200	V	37.0	20.0
0.122357	48.85	82.60	33.75	1000.0	0.200	V	107.0	20.0
0.200745	44.10	82.60	38.50	1000.0	9.000	V	124.0	20.0
0.283325	34.48	82.60	48.12	1000.0	9.000	V	80.0	20.0



Note.1 The worst case data were reported

And no other spurious and harmonic emissions were reported greater than listed emission above table

Note.2 “F”=Fundamental / “S”=Spurious / “*” = Noise Floor

Note.3 All measurements were recorded using a spectrum analyzer employing a Average detector for below 30 MHz

Note.4 Distance Correction Factor (D.C.F.)

For 30 m: $40\log(30/10) = 19.08 \text{ dB}$

Note.5 Sample calculation

Field Strength = Reading – D.C.F

Margin = Limit – Field Strength

Where, D.C.F = Distance Correction Factor

Note.6 “V1”= Vertical and perpendicular to the centerline / “V2”=vertical and parallel to the centerline

“H” = horizontal (parallel to the ground)

Note.7 Cooking element

“1”= left front hob ,”2”= left rear hob, “3”= Center hob, “4”= right front hob, “5”= right rear hob





8. Sample Calculations

$$\begin{aligned} \text{dB}\mu\text{V} &= 20 \text{ Log}_{10}(\mu\text{V}/\text{m}) \\ \text{dB}\mu\text{V} &= \text{dBm} + 107 \\ \mu\text{V} &= 10^{(\text{dB}\mu\text{V}/20)} \end{aligned}$$

8.1 Example 1 :

■ 20.3 MHz

Class B Limit	= 250 μV = 48 dB μV
Reading	= 39.2 dB μV
$10^{(39.2\text{dB}\mu\text{V}/20)}$	= 91.2 μV
Margin	= 48 dB μV - 39.2 dB μV = 8.8 dB

8.2 Example 2 :

■ 66.7 MHz

Class B Limit	= 100 $\mu\text{V}/\text{m}$ = 40.0 dB $\mu\text{V}/\text{m}$
Reading	= 31.0 dB μV
Antenna Factor + Cable Loss	= 5.8 dB
Total	= 36.8 dB $\mu\text{V}/\text{m}$
Margin	= 40.0 dB $\mu\text{V}/\text{m}$ - 36.8 dB $\mu\text{V}/\text{m}$ = 3.2 dB



9. Recommendation & Conclusion

The data collected shows that the **HOUSEHOLD COOKTOP (Model Name: CBIH3617BE)** was complies with § 18.305 and 18.307 of the FCC Rules.

- The end -

