

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. 04, 2024
Order Number: GETEC-C1-24-706
Test Report Number: GETEC-E3-24-126
Test Site: GUMI UNIVERSITY EMC CENTER
CAB Designation Number: KR0033

FCC ID. : BEJQ50441HA

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	: CBIH3613BE
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-E3-24-126	Oct. 04, 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.** BEJQ50441HA
- **EUT Type** HOUSEHOLD COOKTOP
- **Model Name** CBIH3613BE
- **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. 27, 2024 ~ Oct. 04, 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-E3-24-126
- **Dates of Issue** Oct. 04, 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: CBIH3613B)**.

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)

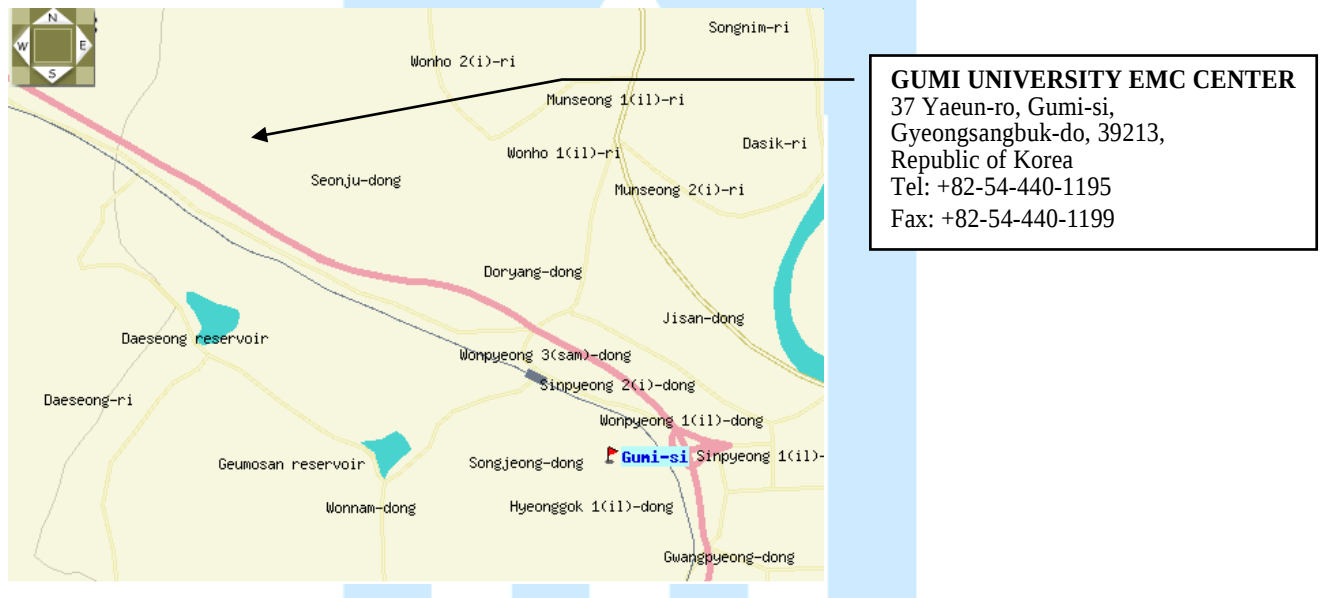


Fig 1. The map above shows the GUMI UNIVERSITY in vicinity area.



3. Product Information

3.1 Description of EUT

The Equipment under Test (EUT) is the **HOUSEHOLD COOKTOP (Model Name: CBIH3613B)**
FCC ID.: BEJQ50441HA

Models		CBIH3613BE		
Description		Induction Cooktop		
Electrical Specifications	Connection voltage	240/208 VAC 60 Hz., 38.4 A / 36.2 A		
	Maximum connected power load	9200 W / 7524 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	7" (177.8 mm)	1472/2290 W (208 V) 1800/2800 W (240 V)
		Front Right	7" (177.8 mm)	1472/2290 W (208 V) 1800/2800 W (240 V)
		Rear Left	6" (152.4 mm)	1145/1472 W (208 V) 1400/1800 W (240 V)
		Rear Right	7" (177.8 mm)	1472/2290 W (208 V) 1800/2800 W (240 V)
		Center	11 1/8" (283 mm)	1963/3517 W (208 V) 2400/4300 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” , “4” , “5”= 180 mm

“3”= 300 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.

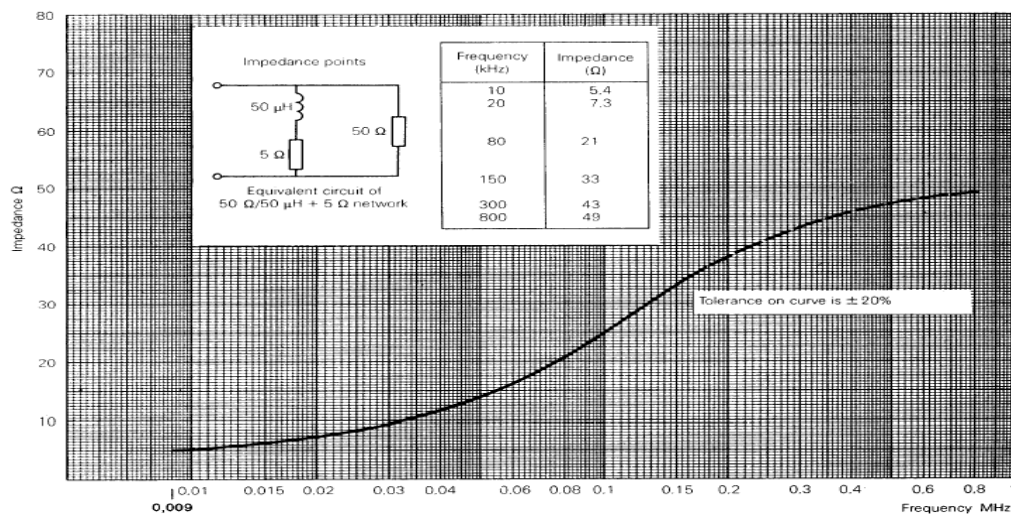


Fig 2. Impedance of LISN



6.1 Operating Environment

Temperature : 23.6 °C
Relative Humidity : 67.4 %
Air Pressure : 100.5 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(dBμV/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

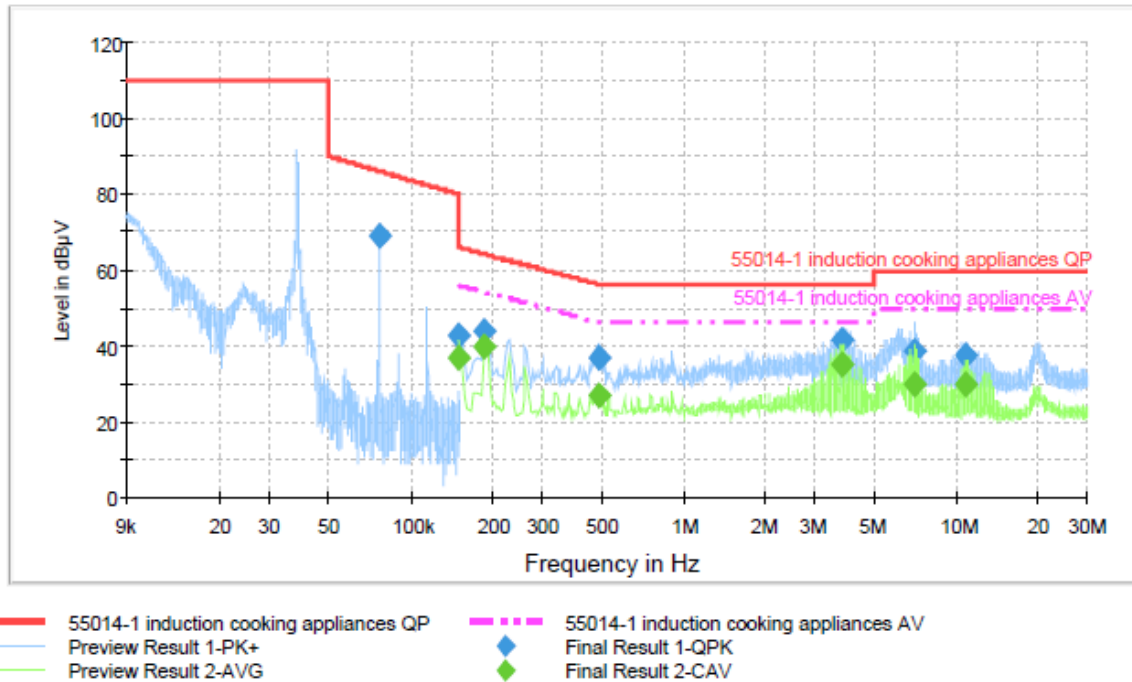
- Test Date	: Sep. 27, 2024 ~ Sep. 29, 2024
- Resolution Bandwidth	: 200 Hz (9 kHz ~ 0.15 MHz) / 9 kHz (0.15 MHz ~ 30 MHz)
- Frequency Range	: 9 kHz ~ 30 MHz
- Line	: L1: Live, L2: Live
- Comment	: None



▪ Operating condition: Induction mode with WLAN

AC 208 V / 60 Hz

Cooking element #1



Final Result 1

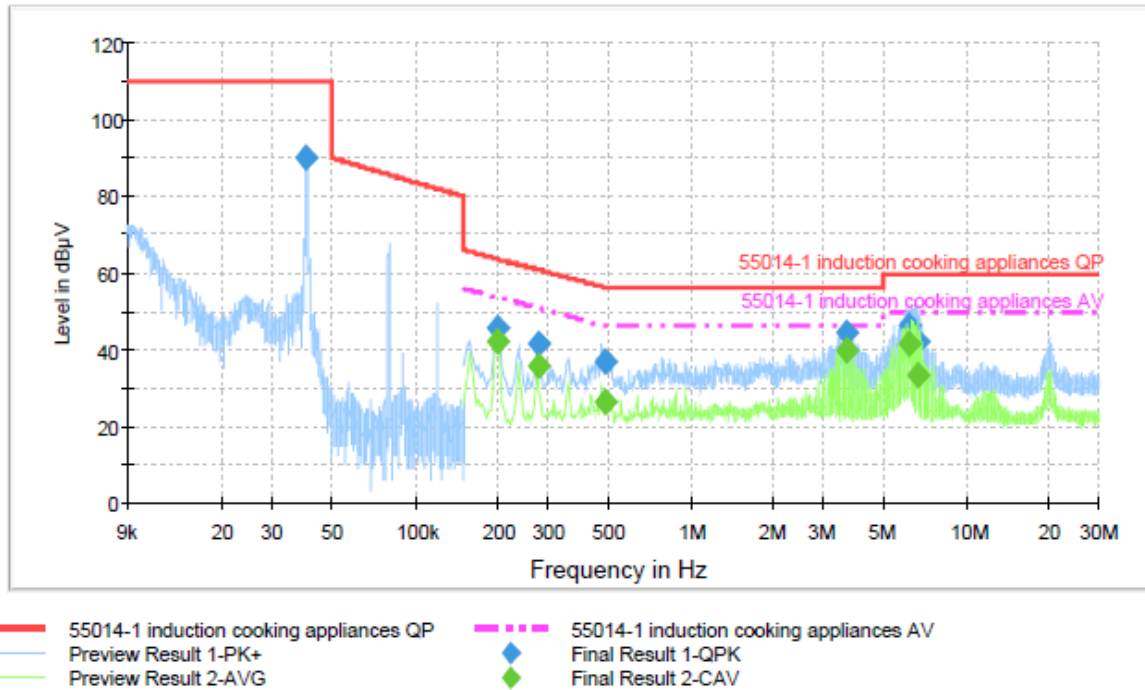
Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.077039	69.2	1000.0	0.200	GND	L1	20.2	62.1	86.3	
0.150000	42.5	1000.0	0.200	GND	L2	20.3	37.5	80.0	
0.186000	43.6	1000.0	9.000	GND	L1	20.7	20.6	64.2	
0.484812	36.9	1000.0	9.000	GND	L1	20.7	19.4	56.3	
3.807475	41.6	1000.0	9.000	GND	L2	20.7	14.4	56.0	
7.021962	38.7	1000.0	9.000	GND	L2	20.8	21.3	60.0	
10.749212	37.5	1000.0	9.000	GND	L1	20.8	22.5	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.150000	36.9	1000.0	9.000	GND	L2	20.6	19.1	56.0	
0.186000	39.7	1000.0	9.000	GND	L1	20.7	14.5	54.2	
0.484812	27.0	1000.0	9.000	GND	L1	20.7	19.3	46.3	
3.807475	35.4	1000.0	9.000	GND	L2	20.7	10.6	46.0	
7.021962	29.6	1000.0	9.000	GND	L2	20.8	20.4	50.0	
10.749212	29.7	1000.0	9.000	GND	L1	20.8	20.3	50.0	



Cooking element #2



Final Result 1

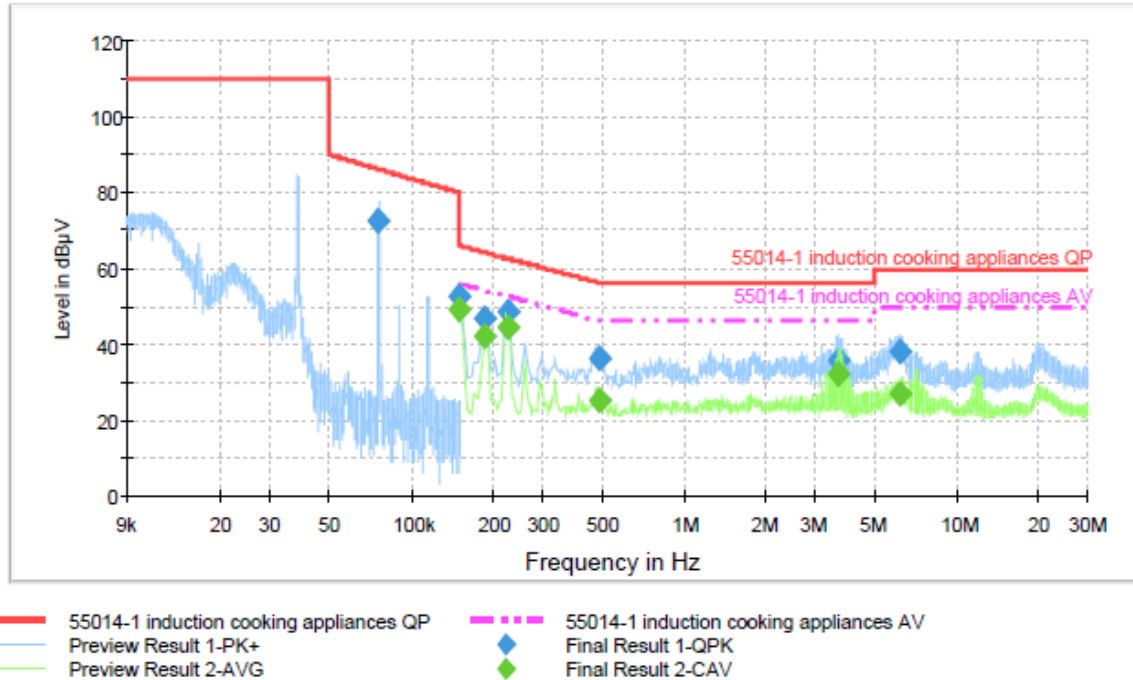
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.040355	90.1	1000.0	0.200	GND	L1	19.8	19.9	110.0	
0.198819	45.4	1000.0	9.000	GND	L1	20.7	18.3	63.7	
0.277178	41.3	1000.0	9.000	GND	L2	20.6	19.6	60.9	
0.485619	36.9	1000.0	9.000	GND	L1	20.7	19.3	56.2	
3.628106	44.5	1000.0	9.000	GND	L2	20.7	11.5	56.0	
6.217056	46.0	1000.0	9.000	GND	L2	20.7	14.0	60.0	
6.595019	42.4	1000.0	9.000	GND	L1	20.8	17.6	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.198819	42.0	1000.0	9.000	GND	L1	20.7	11.7	53.7	
0.277178	36.0	1000.0	9.000	GND	L2	20.6	14.9	50.9	
0.485619	26.1	1000.0	9.000	GND	L1	20.7	20.1	46.2	
3.628106	39.7	1000.0	9.000	GND	L2	20.7	6.3	46.0	
6.217056	41.3	1000.0	9.000	GND	L2	20.7	8.7	50.0	
6.595019	33.5	1000.0	9.000	GND	L1	20.8	16.5	50.0	



Cooking element #3



Final Result 1

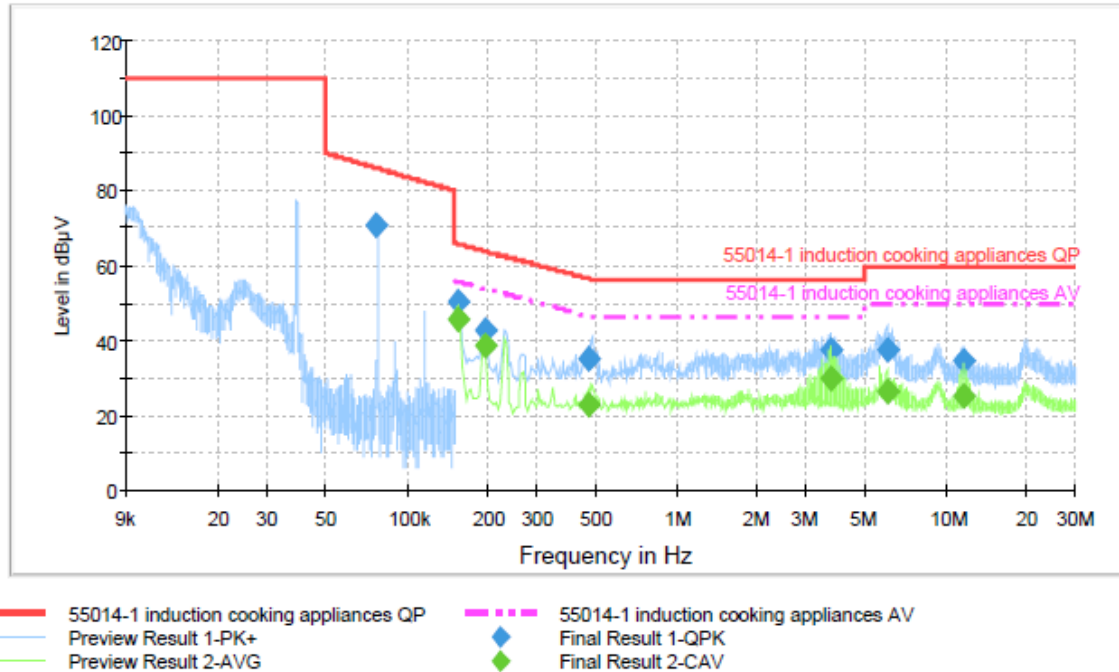
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.074992	72.4	1000.0	0.200	GND	L1	20.2	13.9	86.3	
0.150000	52.7	1000.0	0.200	GND	L1	20.4	13.3	66.0	
0.186299	46.7	1000.0	9.000	GND	L2	20.6	17.5	64.2	
0.223894	48.4	1000.0	9.000	GND	L1	20.7	14.3	62.7	
0.489350	36.3	1000.0	9.000	GND	L1	20.7	19.9	56.2	
3.630256	36.0	1000.0	9.000	GND	L2	20.7	20.0	56.0	
6.122731	38.1	1000.0	9.000	GND	L2	20.7	21.9	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.150000	49.4	1000.0	9.000	GND	L1	20.7	6.6	56.0	
0.186299	42.3	1000.0	9.000	GND	L2	20.6	11.9	54.2	
0.223894	44.7	1000.0	9.000	GND	L1	20.7	8.0	52.7	
0.489350	25.4	1000.0	9.000	GND	L1	20.7	20.8	46.2	
3.630256	32.5	1000.0	9.000	GND	L2	20.7	13.5	46.0	
6.122731	27.2	1000.0	9.000	GND	L2	20.7	22.8	50.0	



Cooking element #4



Final Result 1

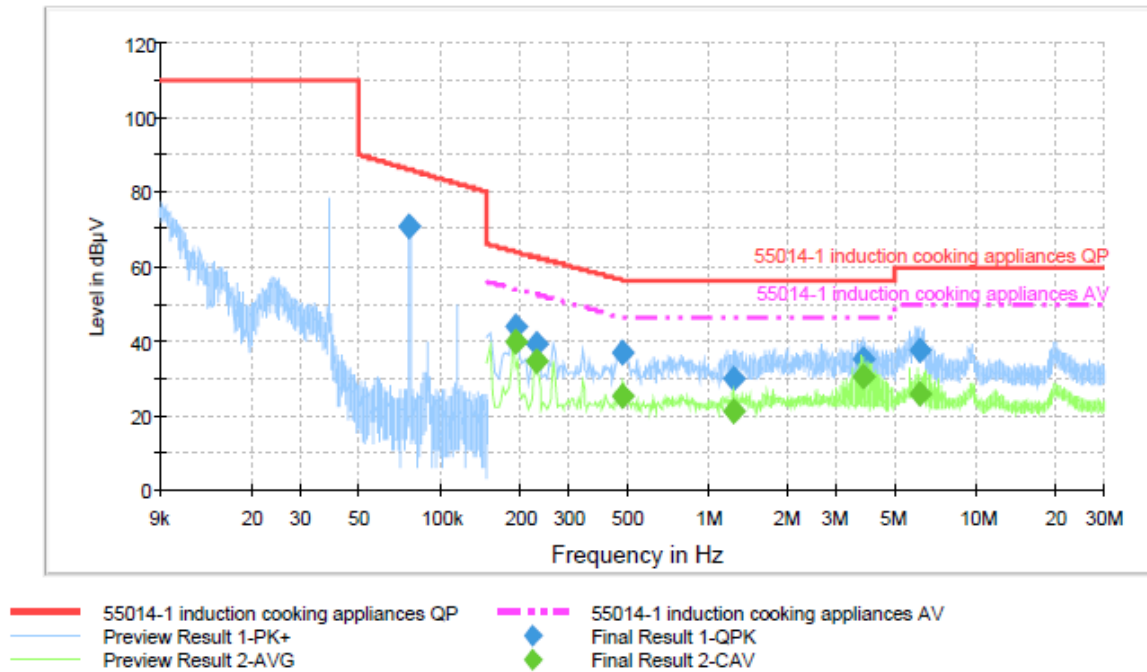
Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.076526	71.0	1000.0	0.200	GND	L1	20.2	15.1	86.1	
0.154000	50.1	1000.0	9.000	GND	L2	20.6	15.7	65.8	
0.195356	42.9	1000.0	9.000	GND	L2	20.6	20.9	63.8	
0.472812	35.2	1000.0	9.000	GND	L2	20.6	21.3	56.5	
3.728075	37.6	1000.0	9.000	GND	L2	20.7	18.4	56.0	
6.023600	37.5	1000.0	9.000	GND	L1	20.8	22.5	60.0	
11.559938	34.3	1000.0	9.000	GND	L1	20.8	25.7	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.154000	46.0	1000.0	9.000	GND	L2	20.6	9.8	55.8	
0.195356	38.5	1000.0	9.000	GND	L2	20.6	15.3	53.8	
0.472812	22.9	1000.0	9.000	GND	L2	20.6	23.6	46.5	
3.728075	29.9	1000.0	9.000	GND	L2	20.7	16.1	46.0	
6.023600	26.2	1000.0	9.000	GND	L1	20.8	23.8	50.0	
11.559938	25.4	1000.0	9.000	GND	L1	20.8	24.6	50.0	



Cooking element #5



Final Result 1

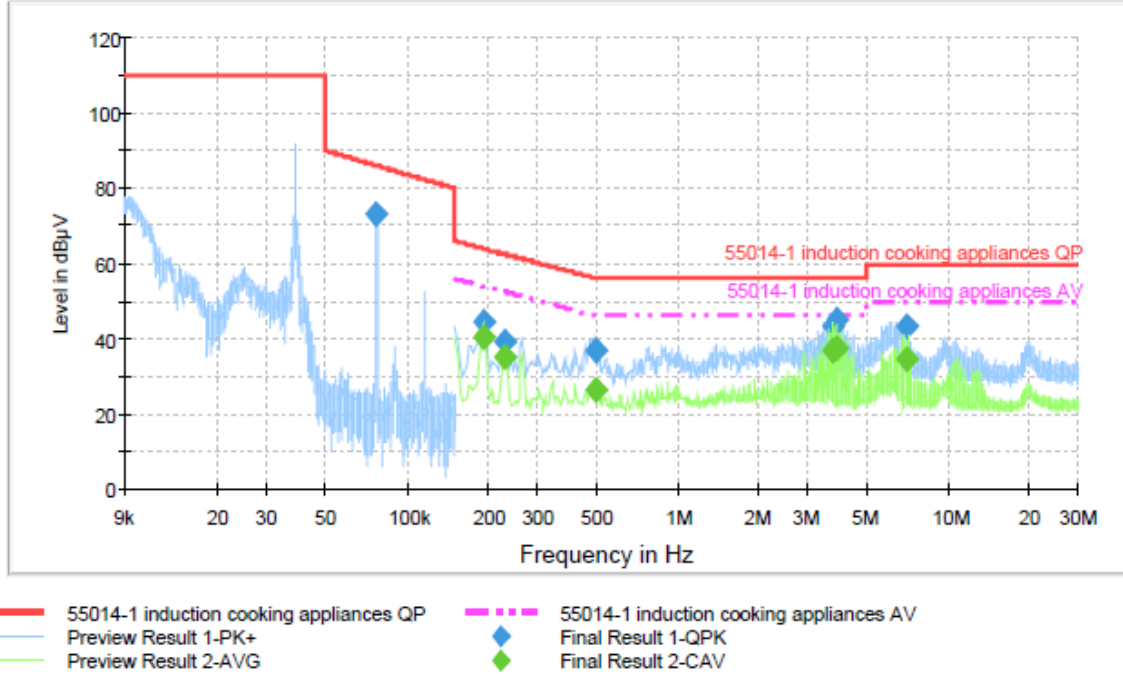
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.076138	70.6	1000.0	0.200	GND	L1	20.2	15.6	86.2	
0.190000	43.8	1000.0	9.000	GND	L2	20.6	20.2	64.0	
0.228669	39.3	1000.0	9.000	GND	L1	20.7	23.2	62.5	
0.481350	36.7	1000.0	9.000	GND	L2	20.6	19.7	56.3	
1.249719	30.0	1000.0	9.000	GND	L2	20.6	26.0	56.0	
3.820281	35.4	1000.0	9.000	GND	L1	20.8	20.6	56.0	
6.123538	37.4	1000.0	9.000	GND	L2	20.7	22.6	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.190000	39.5	1000.0	9.000	GND	L2	20.6	14.5	54.0	
0.228669	34.7	1000.0	9.000	GND	L1	20.7	17.8	52.5	
0.481350	25.5	1000.0	9.000	GND	L2	20.6	20.9	46.3	
1.249719	21.1	1000.0	9.000	GND	L2	20.6	24.9	46.0	
3.820281	30.3	1000.0	9.000	GND	L1	20.8	15.7	46.0	
6.123538	25.7	1000.0	9.000	GND	L2	20.7	24.3	50.0	



AC 240 V / 60 Hz
Cooking element #1



Final Result 1

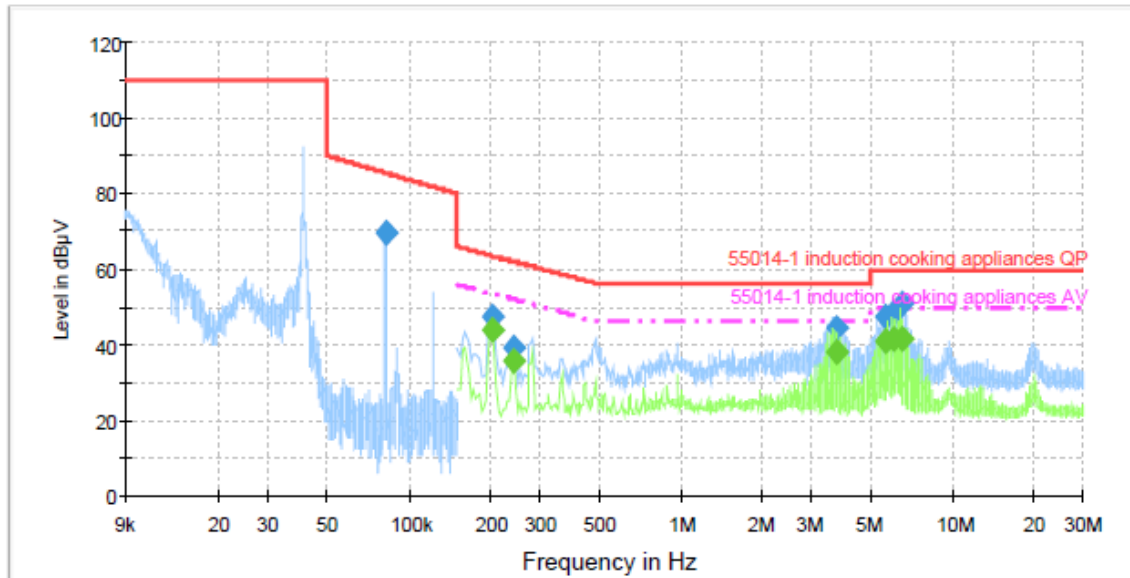
Frequency (MHz)	QuasiPeak (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.076385	73.2	1000.0	0.200	GND	L2	20.1	12.9	86.1	
0.190839	44.4	1000.0	9.000	GND	L1	20.7	19.6	64.0	
0.228669	39.2	1000.0	9.000	GND	L1	20.7	23.3	62.5	
0.492812	36.7	1000.0	9.000	GND	L1	20.7	19.4	56.1	
3.729419	43.5	1000.0	9.000	GND	L1	20.8	12.5	56.0	
3.844788	45.1	1000.0	9.000	GND	L1	20.8	10.9	56.0	
6.977456	43.3	1000.0	9.000	GND	L1	20.8	16.7	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBμV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBμV)	Comment
0.190839	40.2	1000.0	9.000	GND	L1	20.7	13.8	54.0	
0.228669	34.8	1000.0	9.000	GND	L1	20.7	17.7	52.5	
0.492812	26.4	1000.0	9.000	GND	L1	20.7	19.7	46.1	
3.729419	37.0	1000.0	9.000	GND	L1	20.8	9.0	46.0	
3.844788	37.4	1000.0	9.000	GND	L1	20.8	8.6	46.0	
6.977456	34.7	1000.0	9.000	GND	L1	20.8	15.3	50.0	



Cooking element #2



— 55014-1 induction cooking appliances QP
— 55014-1 induction cooking appliances AV
— Preview Result 1-PK+
— Preview Result 2-AVG
◆ Final Result 1-QPK
◆ Final Result 2-CAV

Final Result 1

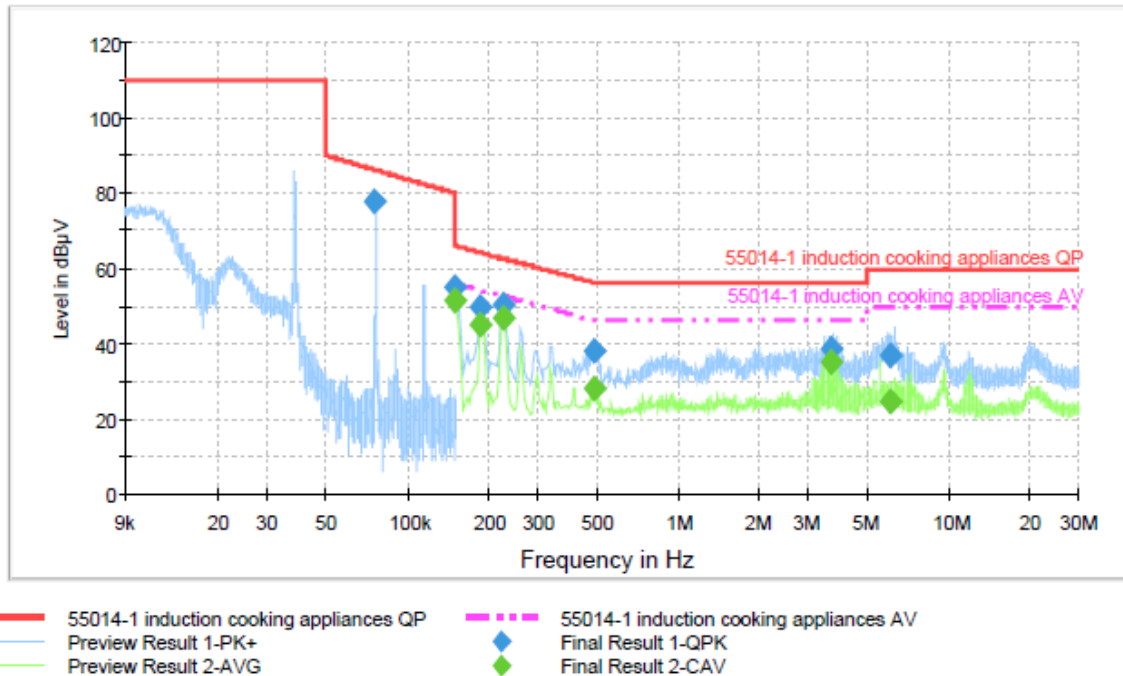
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.082262	69.5	1000.0	0.200	GND	L1	20.3	16.0	85.5	
0.201238	47.4	1000.0	9.000	GND	L1	20.7	16.2	63.6	
0.243325	39.5	1000.0	9.000	GND	L1	20.7	22.5	62.0	
3.699300	44.5	1000.0	9.000	GND	L1	20.8	11.5	56.0	
5.678175	47.2	1000.0	9.000	GND	L1	20.8	12.8	60.0	
6.000825	48.9	1000.0	9.000	GND	L1	20.8	11.1	60.0	
6.483888	50.7	1000.0	9.000	GND	L1	20.8	9.3	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.201238	44.0	1000.0	9.000	GND	L1	20.7	9.6	53.6	
0.243325	35.5	1000.0	9.000	GND	L1	20.7	16.5	52.0	
3.699300	38.0	1000.0	9.000	GND	L1	20.8	8.0	46.0	
5.678175	41.3	1000.0	9.000	GND	L1	20.8	8.7	50.0	
6.000825	41.8	1000.0	9.000	GND	L1	20.8	8.2	50.0	
6.483888	41.8	1000.0	9.000	GND	L1	20.8	8.2	50.0	



Cooking element #3



Final Result 1

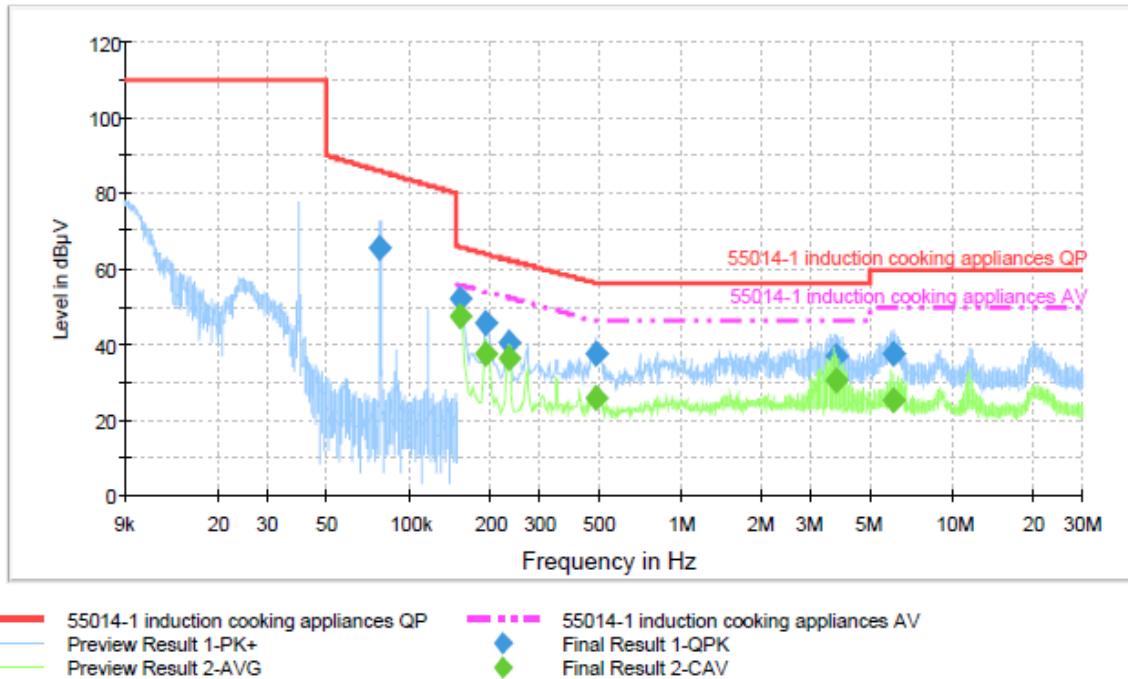
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.075116	78.1	1000.0	0.200	GND	L2	20.1	8.2	86.3	
0.150000	55.0	1000.0	0.200	GND	L1	20.4	11.0	66.0	
0.184069	49.7	1000.0	0.200	GND	L2	20.3	14.6	64.3	
0.223625	50.4	1000.0	9.000	GND	L2	20.6	12.3	62.7	
0.488275	38.1	1000.0	9.000	GND	L1	20.7	18.1	56.2	
3.684075	38.9	1000.0	9.000	GND	L2	20.7	17.1	56.0	
5.999331	36.7	1000.0	9.000	GND	L1	20.8	23.3	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.150000	51.7	1000.0	9.000	GND	L1	20.7	4.3	56.0	
0.184069	45.4	1000.0	9.000	GND	L2	20.6	8.9	54.3	
0.223625	46.8	1000.0	9.000	GND	L2	20.6	5.9	52.7	
0.488275	28.4	1000.0	9.000	GND	L1	20.7	17.8	46.2	
3.684075	35.0	1000.0	9.000	GND	L2	20.7	11.0	46.0	
5.999331	24.7	1000.0	9.000	GND	L1	20.8	25.3	50.0	



Cooking element #4



Final Result 1

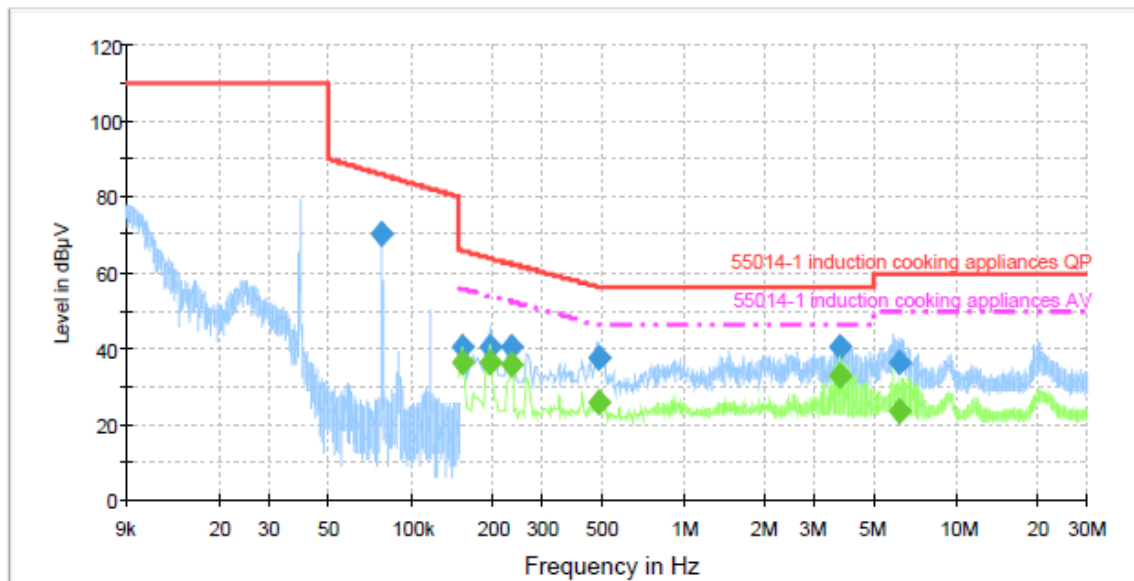
Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.077918	65.3	1000.0	0.200	GND	L2	20.1	20.7	86.0	
0.154000	51.9	1000.0	9.000	GND	L1	20.7	13.9	65.8	
0.190839	45.9	1000.0	9.000	GND	L1	20.7	18.1	64.0	
0.234184	40.5	1000.0	9.000	GND	L1	20.7	21.8	62.3	
0.484812	37.3	1000.0	9.000	GND	L2	20.6	19.0	56.3	
3.757656	37.1	1000.0	9.000	GND	L2	20.7	18.9	56.0	
6.059031	37.3	1000.0	9.000	GND	L2	20.7	22.7	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.154000	47.7	1000.0	9.000	GND	L1	20.7	8.1	55.8	
0.190839	37.4	1000.0	9.000	GND	L1	20.7	16.6	54.0	
0.234184	36.5	1000.0	9.000	GND	L1	20.7	15.8	52.3	
0.484812	25.8	1000.0	9.000	GND	L2	20.6	20.5	46.3	
3.757656	30.5	1000.0	9.000	GND	L2	20.7	15.5	46.0	
6.059031	25.3	1000.0	9.000	GND	L2	20.7	24.7	50.0	



Cooking element #5



— 55014-1 induction cooking appliances QP - - - 55014-1 induction cooking appliances AV
— Preview Result 1-PK+ ◆ Final Result 1-QPK
— Preview Result 2-AVG ◆ Final Result 2-CAV

Final Result 1

Frequency (MHz)	QuasiPeak (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.077513	70.0	1000.0	0.200	GND	L1	20.2	16.0	86.0	
0.153656	40.4	1000.0	9.000	GND	L2	20.6	25.4	65.8	
0.195490	40.3	1000.0	9.000	GND	L2	20.6	23.5	63.8	
0.232669	40.3	1000.0	9.000	GND	L1	20.7	22.1	62.4	
0.484812	37.5	1000.0	9.000	GND	L1	20.7	18.8	56.3	
3.755000	40.3	1000.0	9.000	GND	L2	20.7	15.7	56.0	
6.121388	36.0	1000.0	9.000	GND	L2	20.7	24.0	60.0	

Final Result 2

Frequency (MHz)	CAverage (dBµV)	Meas. Time (ms)	Bandwidth (kHz)	PE	Line	Corr. (dB)	Margin (dB)	Limit (dBµV)	Comment
0.153656	36.3	1000.0	9.000	GND	L2	20.6	19.5	55.8	
0.195490	36.5	1000.0	9.000	GND	L2	20.6	17.3	53.8	
0.232669	35.6	1000.0	9.000	GND	L1	20.7	16.8	52.4	
0.484812	25.9	1000.0	9.000	GND	L1	20.7	20.4	46.3	
3.755000	32.7	1000.0	9.000	GND	L2	20.7	13.3	46.0	
6.121388	23.6	1000.0	9.000	GND	L2	20.7	26.4	50.0	



7. Radiated Emission

7.1 Operating Environment

Temperature : 21.3 °C
Relative Humidity : 41.9 %
Air Pressure : 100.9 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.

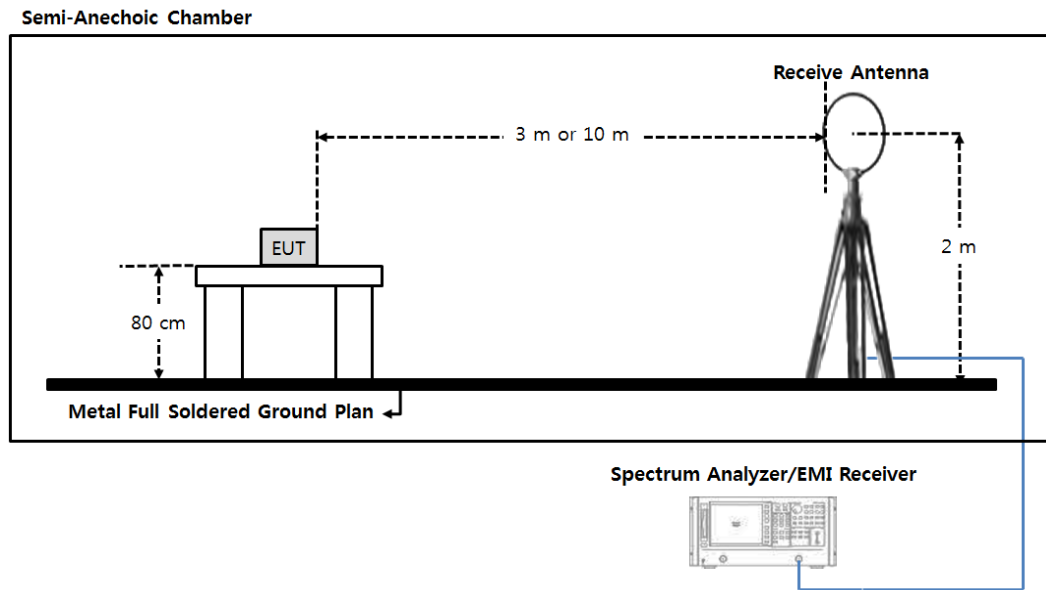


Fig 3. Configurations of Radiated emission test (9 kHz to 30 MHz)

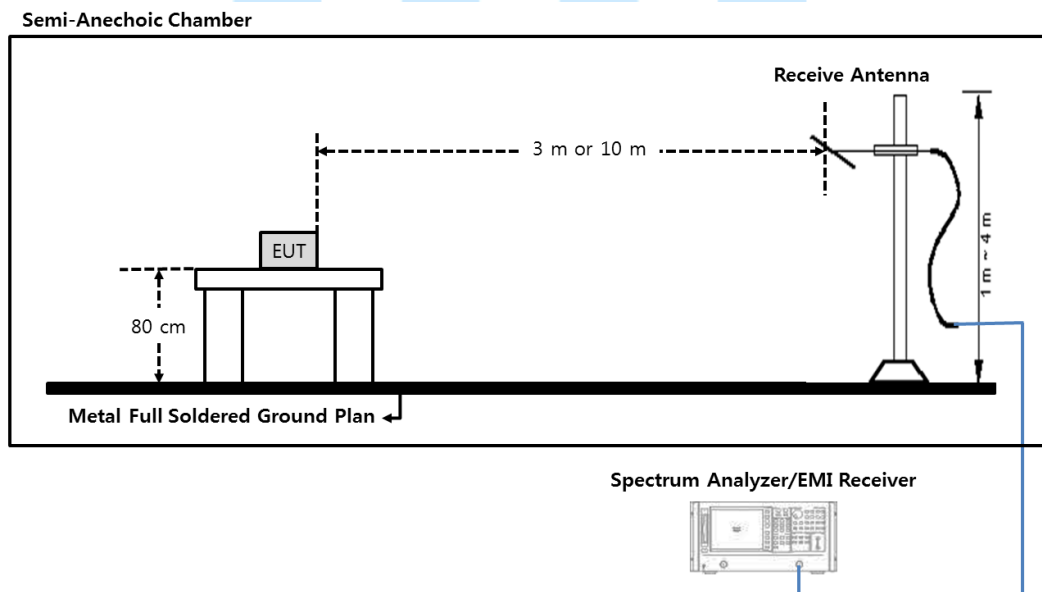


Fig 4. Configurations of Radiated emission test (30 MHz to 1 000 MHz)



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.

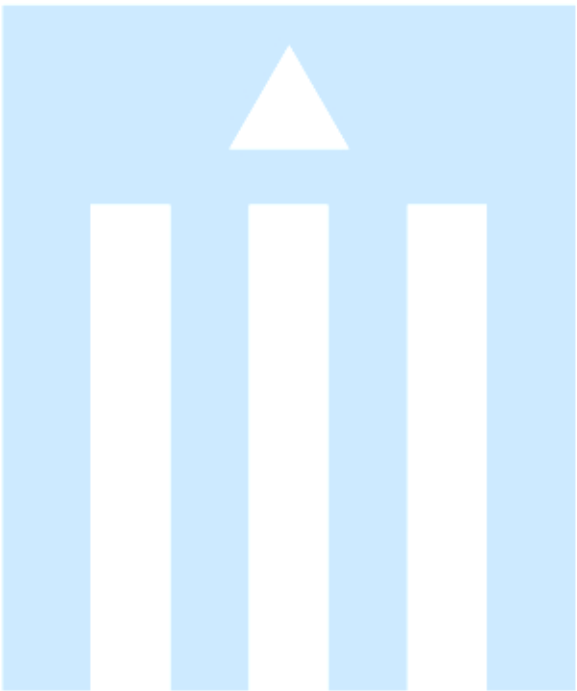


7.6 Test data for Radiated Emission

- Test Date : Oct. 03, 2024 ~ Oct. 04, 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

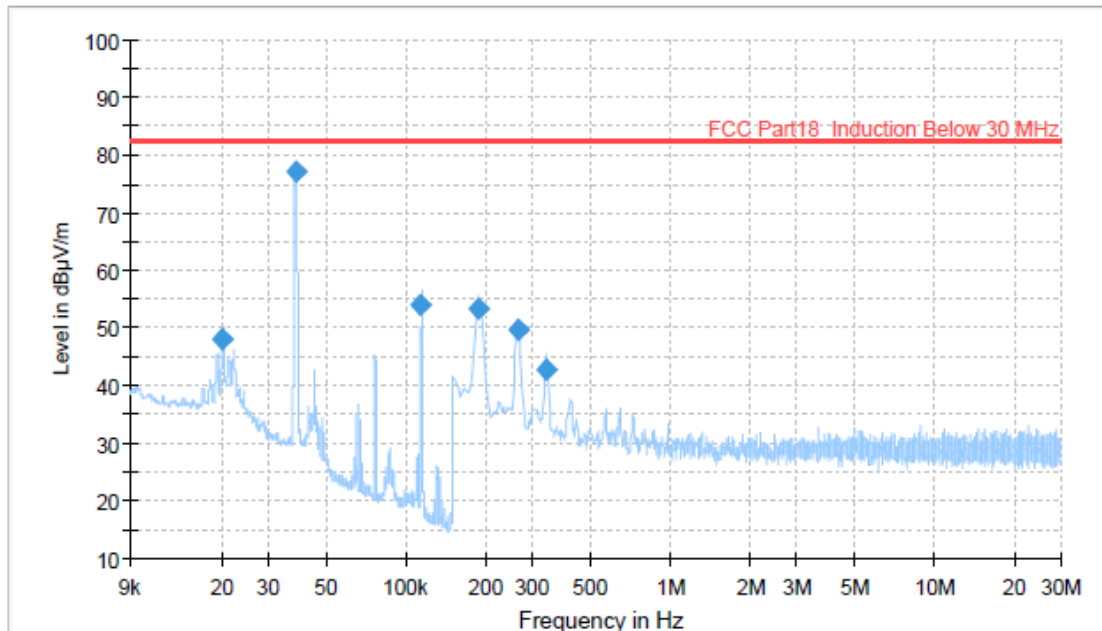
Frequency range	9 kHz ~ 150 kHz	0.15 MHz ~ 30 MHz
Detector mode	Average	Average
Resolution bandwidth	200 Hz	9 kHz





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

Cooking Element #1_H



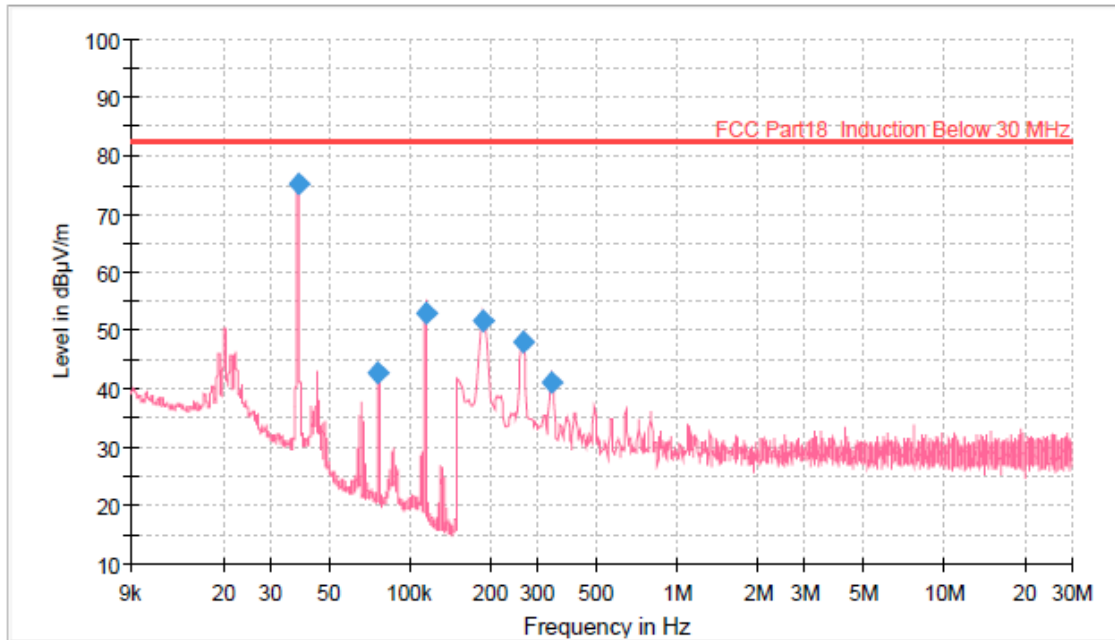
Preview Result 1H-AVG FCC Part18_Induction Below 30 MHz Final_Result AVC

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020052	48.09	82.60	34.51	1000.0	0.200	H	210.0	20.3
0.038046	77.16	82.60	5.44	1000.0	0.200	H	76.0	20.1
0.113868	54.11	82.60	28.49	1000.0	0.200	H	76.0	20.0
0.186000	53.20	82.60	29.40	1000.0	9.000	H	37.0	20.0
0.264430	49.65	82.60	32.95	1000.0	9.000	H	66.0	20.0
0.336040	42.80	82.60	39.80	1000.0	9.000	H	49.0	20.0



Cooking Element #1_V



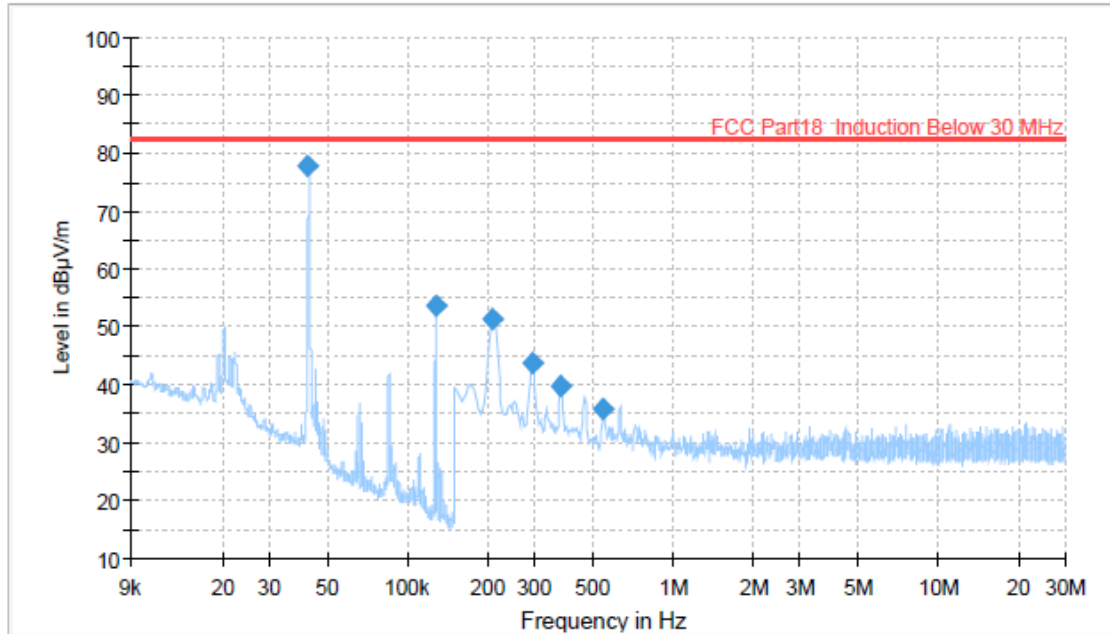
Preview Result 1V-AVG FCC Part18_Induction Below 30 MHz Final_Result AVG

Final Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.037990	75.29	82.60	7.31	1000.0	0.200	V	157.0	20.1
0.074989	42.90	82.60	39.70	1000.0	0.200	V	44.0	20.0
0.114871	53.07	82.60	29.53	1000.0	0.200	V	157.0	20.0
0.188805	51.85	82.60	30.75	1000.0	9.000	V	140.0	20.0
0.263430	48.01	82.60	34.59	1000.0	9.000	V	347.0	20.0
0.341040	41.10	82.60	41.50	1000.0	9.000	V	0.0	20.0



Cooking Element #2_H



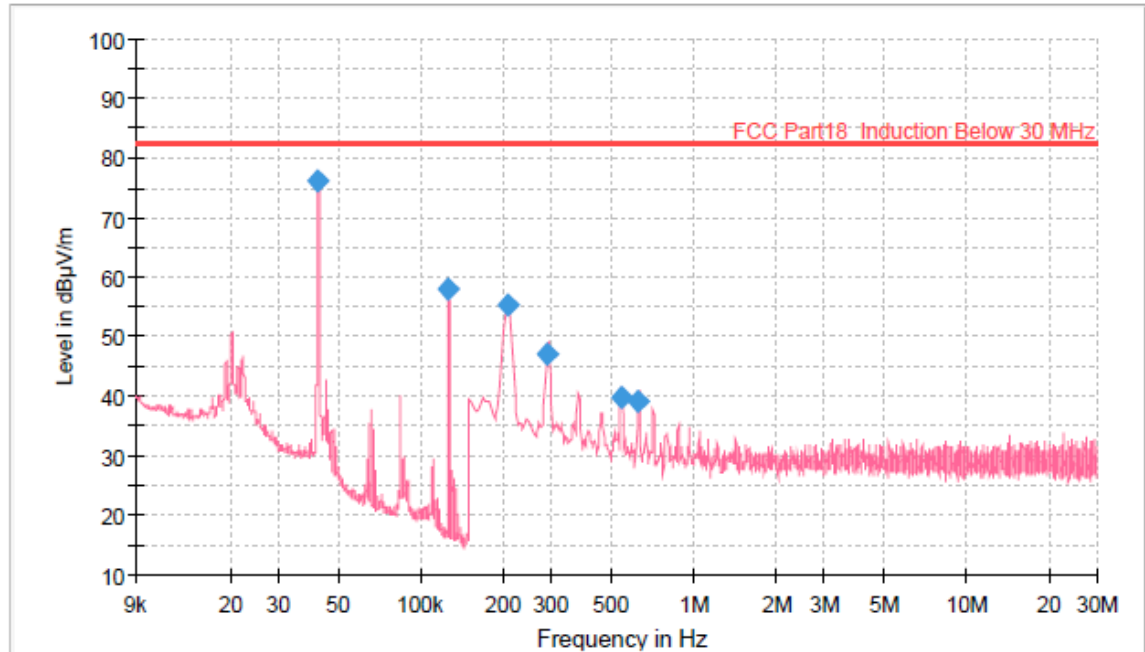
— Preview Result 1H-AVG — FCC Part18_Induction Below 30 MHz ◆ Final_Result AVC

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.041921	77.99	82.60	4.61	1000.0	0.200	H	99.0	20.1
0.127782	53.82	82.60	28.78	1000.0	0.200	H	108.0	20.0
0.208700	51.20	82.60	31.40	1000.0	9.000	H	150.0	20.0
0.292280	43.83	82.60	38.77	1000.0	9.000	H	150.0	20.0
0.378845	39.75	82.60	42.85	1000.0	9.000	H	0.0	20.0
0.542005	35.71	82.60	46.89	1000.0	9.000	H	166.0	20.0



Cooking Element #2_V



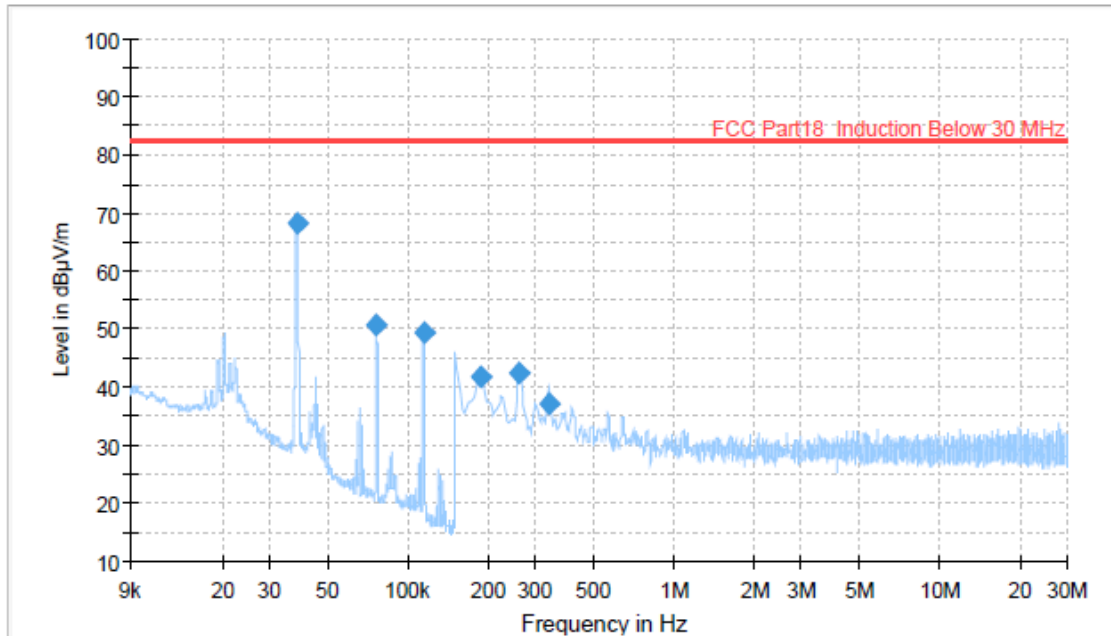
Preview Result 1V-AVG FCC Part18_Induction Below 30 MHz Final_Result AVC

Final Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.042065	76.22	82.60	6.38	1000.0	0.200	V	186.0	20.1
0.126086	57.84	82.60	24.76	1000.0	0.200	V	166.0	20.0
0.208700	55.48	82.60	27.12	1000.0	9.000	V	149.0	20.0
0.290295	47.09	82.60	35.51	1000.0	9.000	V	178.0	20.0
0.544020	39.81	82.60	42.79	1000.0	9.000	V	182.0	20.0
0.627600	39.20	82.60	43.40	1000.0	9.000	V	178.0	20.0



Cooking Element #3_H



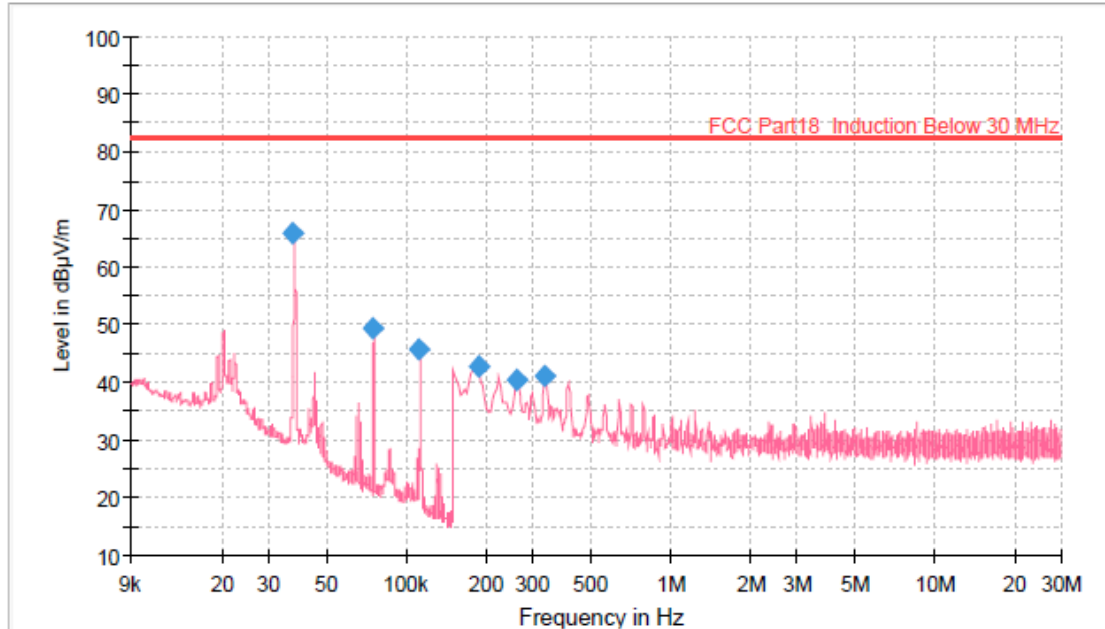
Preview Result 1H-AVG FCC Part18_Induction Below 30 MHz Final_Result AVC

Final Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.037976	68.20	82.60	14.40	1000.0	0.200	H	182.0	20.1
0.075841	50.84	82.60	31.76	1000.0	0.200	H	136.0	20.0
0.114749	49.41	82.60	33.19	1000.0	0.200	H	186.0	20.0
0.186000	41.80	82.60	40.80	1000.0	9.000	H	116.0	20.0
0.262430	42.34	82.60	40.26	1000.0	9.000	H	6.0	20.0
0.337055	37.29	82.60	45.31	1000.0	9.000	H	0.0	20.0



Cooking Element #3_V



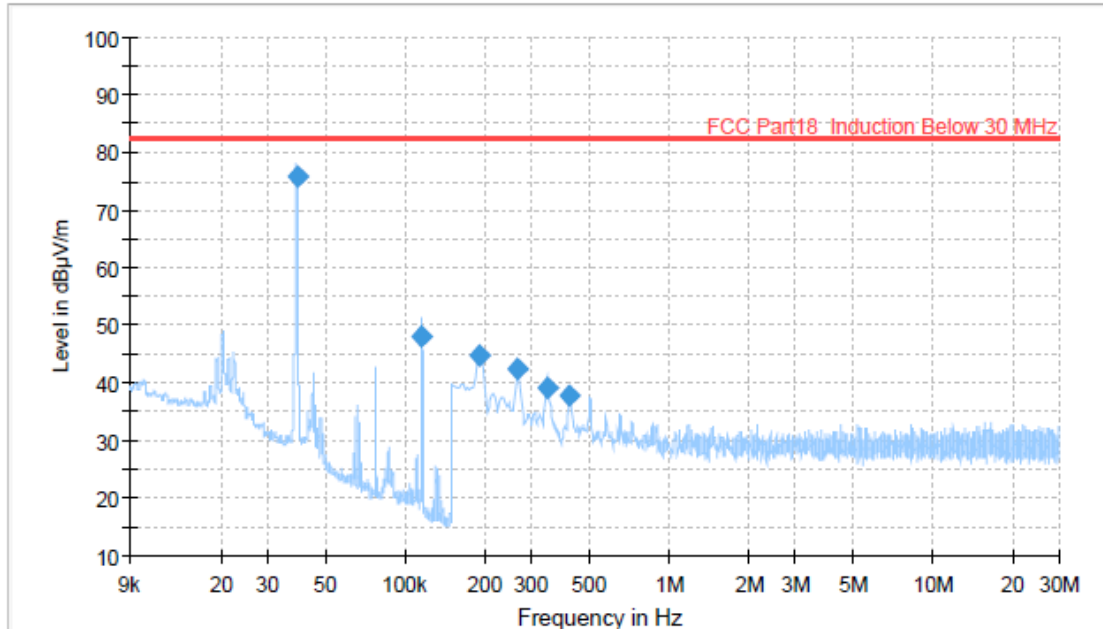
— Preview Result 1V-AVG — FCC Part18_Induction Below 30 MHz ◆ Final_Result AVG

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.036967	65.79	82.60	16.81	1000.0	0.200	V	249.0	20.1
0.074439	49.49	82.60	33.11	1000.0	0.200	V	24.0	20.0
0.111706	45.72	82.60	36.88	1000.0	0.200	V	249.0	20.0
0.186000	42.85	82.60	39.75	1000.0	9.000	V	5.0	20.0
0.259445	40.31	82.60	42.29	1000.0	9.000	V	256.0	20.0
0.335070	41.26	82.60	41.34	1000.0	9.000	V	320.0	20.0



Cooking Element #4_H



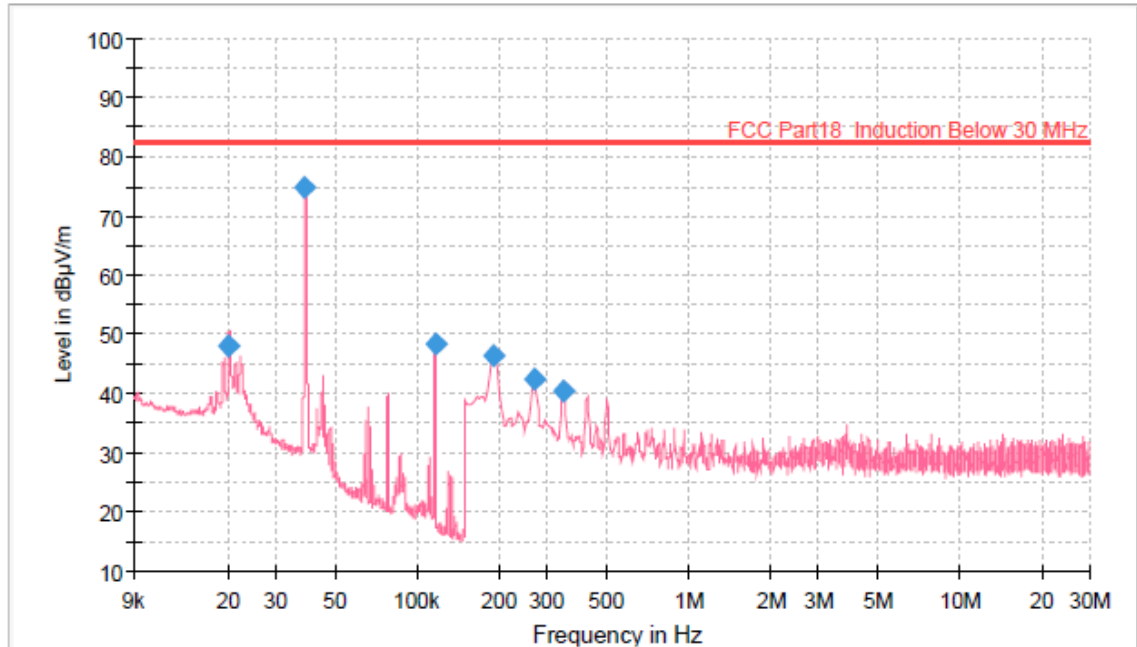
— Preview Result 1H-AVG — FCC Part18_Induction Below 30 MHz ◆ Final_Result AVC

Final Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.038994	75.97	82.60	6.63	1000.0	0.200	H	187.0	20.1
0.114700	48.02	82.60	34.58	1000.0	0.200	H	162.0	20.0
0.190000	44.90	82.60	37.70	1000.0	9.000	H	162.0	20.0
0.265415	42.56	82.60	40.04	1000.0	9.000	H	25.0	20.0
0.344025	39.11	82.60	43.49	1000.0	9.000	H	207.0	20.0
0.416635	37.71	82.60	44.89	1000.0	9.000	H	187.0	20.0



Cooking Element #4_V



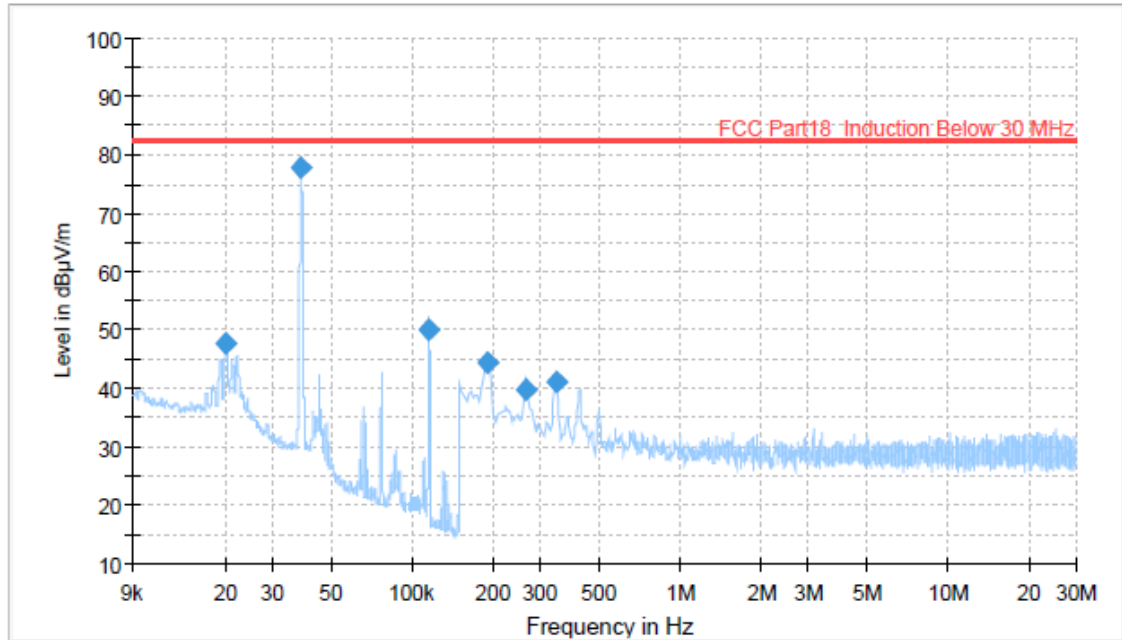
Preview Result 1V-AVG FCC Part18_Induction Below 30 MHz Final_Result AVC

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	48.20	82.60	34.40	1000.0	0.200	V	160.0	20.3
0.038005	74.74	82.60	7.86	1000.0	0.200	V	112.0	20.1
0.115927	48.36	82.60	34.24	1000.0	0.200	V	112.0	20.0
0.190000	46.39	82.60	36.21	1000.0	9.000	V	98.0	20.0
0.269400	42.53	82.60	40.07	1000.0	9.000	V	285.0	20.0
0.344025	40.42	82.60	42.18	1000.0	9.000	V	318.0	20.0



Cooking Element #5_H



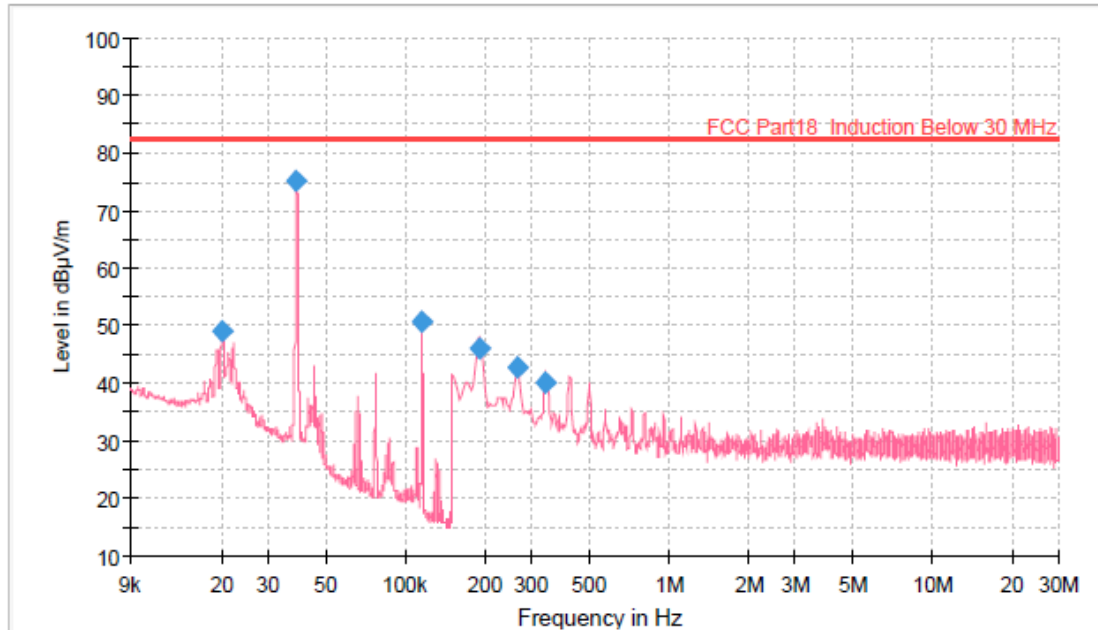
— Preview Result 1H-AVG — FCC Part18_Induction Below 30 MHz ◆ Final_Result AVC

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020038	47.72	82.60	34.88	1000.0	0.200	H	81.0	20.3
0.038441	77.98	82.60	4.62	1000.0	0.200	H	164.0	20.1
0.114916	49.96	82.60	32.64	1000.0	0.200	H	164.0	20.0
0.190000	44.55	82.60	38.05	1000.0	9.000	H	159.0	20.0
0.266415	39.80	82.60	42.80	1000.0	9.000	H	268.0	20.0
0.344025	41.20	82.60	41.40	1000.0	9.000	H	211.0	20.0



Cooking Element #5_V



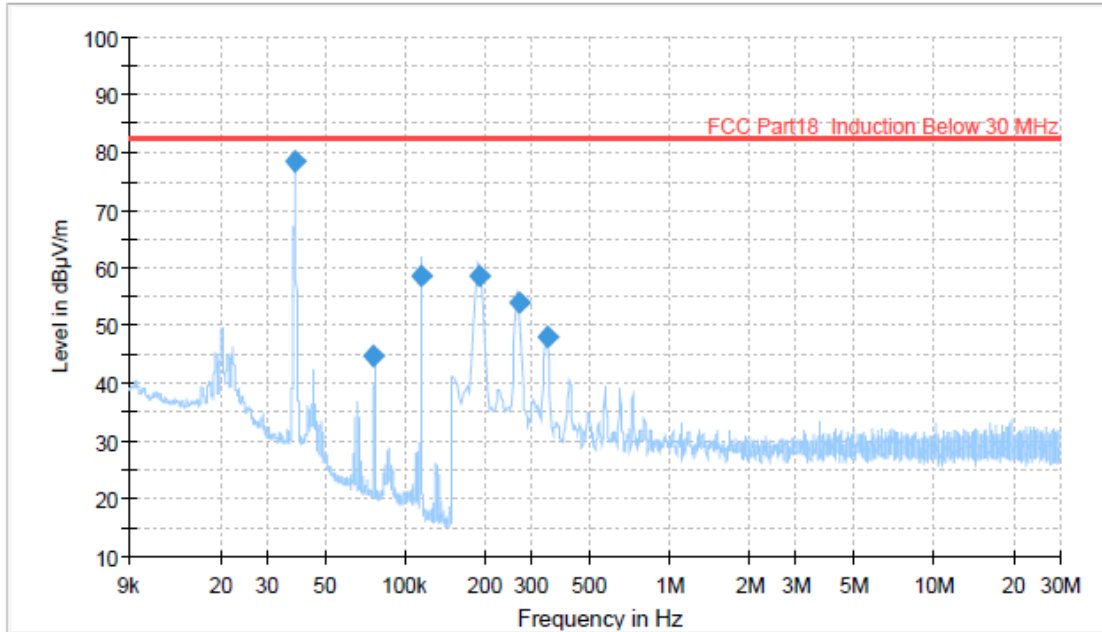
Final Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.020038	48.89	82.60	33.71	1000.0	0.200	V	18.0	20.3
0.038384	75.30	82.60	7.30	1000.0	0.200	V	88.0	20.1
0.114912	50.68	82.60	31.92	1000.0	0.200	V	74.0	20.0
0.191790	46.11	82.60	36.49	1000.0	9.000	V	81.0	20.0
0.266415	42.71	82.60	39.89	1000.0	9.000	V	48.0	20.0
0.341040	40.26	82.60	42.34	1000.0	9.000	V	105.0	20.0



[AC 240V, 60 Hz]

Cooking Element #1_H



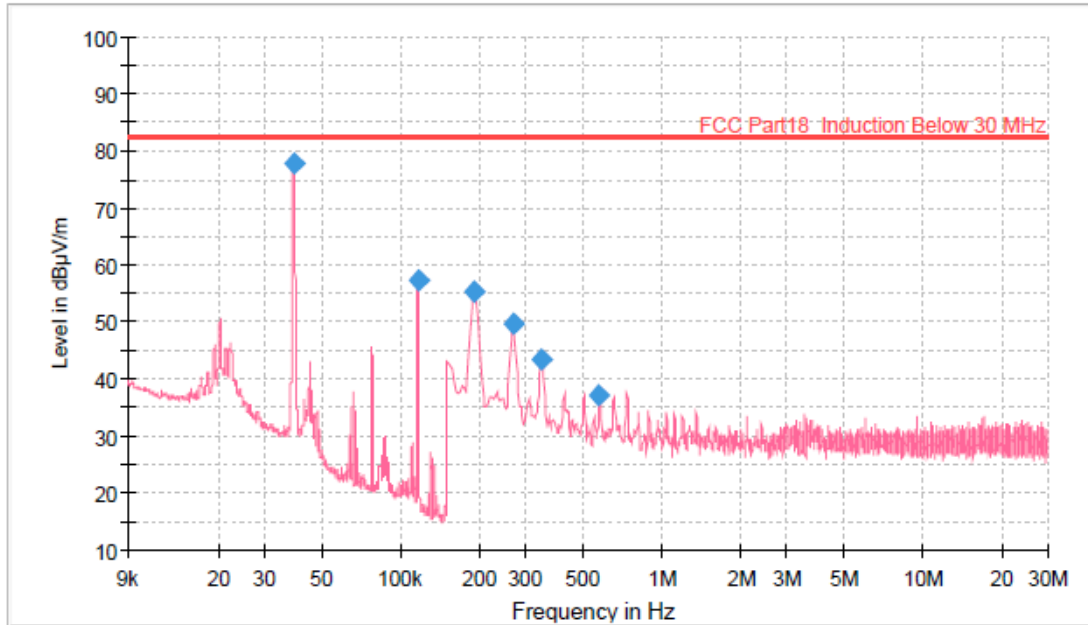
Preview Result 1H-AVG FCC Part18_Induction Below 30 MHz Final_Result AVC

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.038363	78.54	82.60	4.06	1000.0	0.200	H	57.0	20.1
0.075868	44.76	82.60	37.84	1000.0	0.200	H	128.0	20.0
0.115162	58.53	82.60	24.07	1000.0	0.200	H	53.0	20.0
0.190000	58.57	82.60	24.03	1000.0	9.000	H	48.0	20.0
0.269415	54.11	82.60	28.49	1000.0	9.000	H	48.0	20.0
0.347025	47.92	82.60	34.68	1000.0	9.000	H	48.0	20.0



Cooking Element #1_V



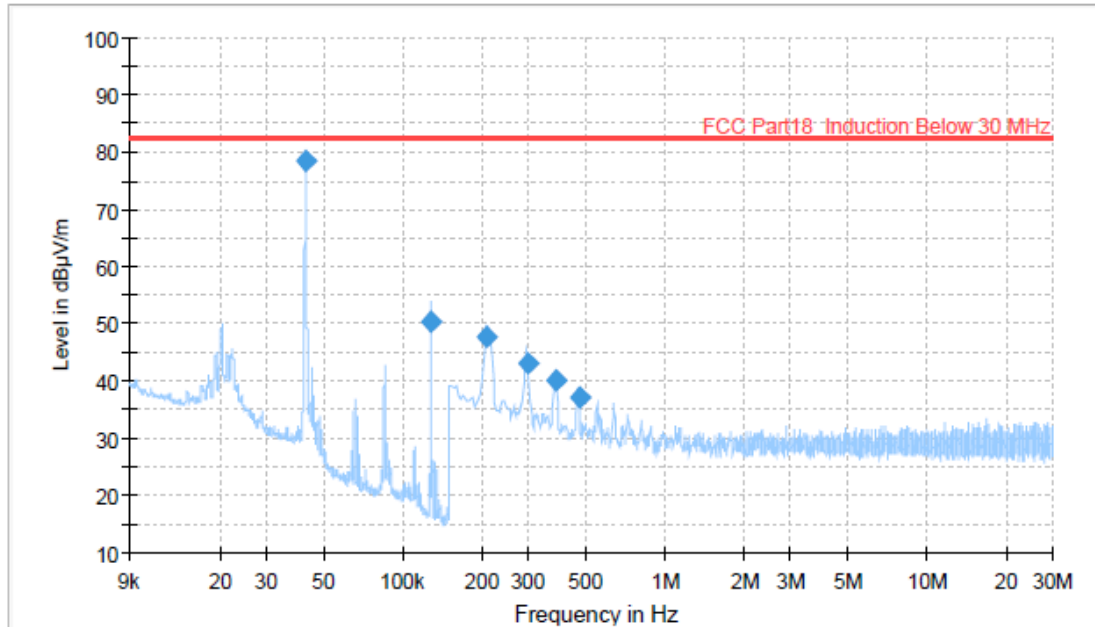
— Preview Result 1V-AVG — FCC Part18_Induction Below 30 MHz ◆ Final_Result AVC

Final Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.039271	77.69	82.60	4.91	1000.0	0.200	V	155.0	20.1
0.115927	57.42	82.60	25.18	1000.0	0.200	V	167.0	20.0
0.190000	55.38	82.60	27.22	1000.0	9.000	V	145.0	20.0
0.269400	49.59	82.60	33.01	1000.0	9.000	V	317.0	20.0
0.346010	43.26	82.60	39.34	1000.0	9.000	V	0.0	20.0
0.574840	37.05	82.60	45.55	1000.0	9.000	V	18.0	20.0



Cooking Element #2_H



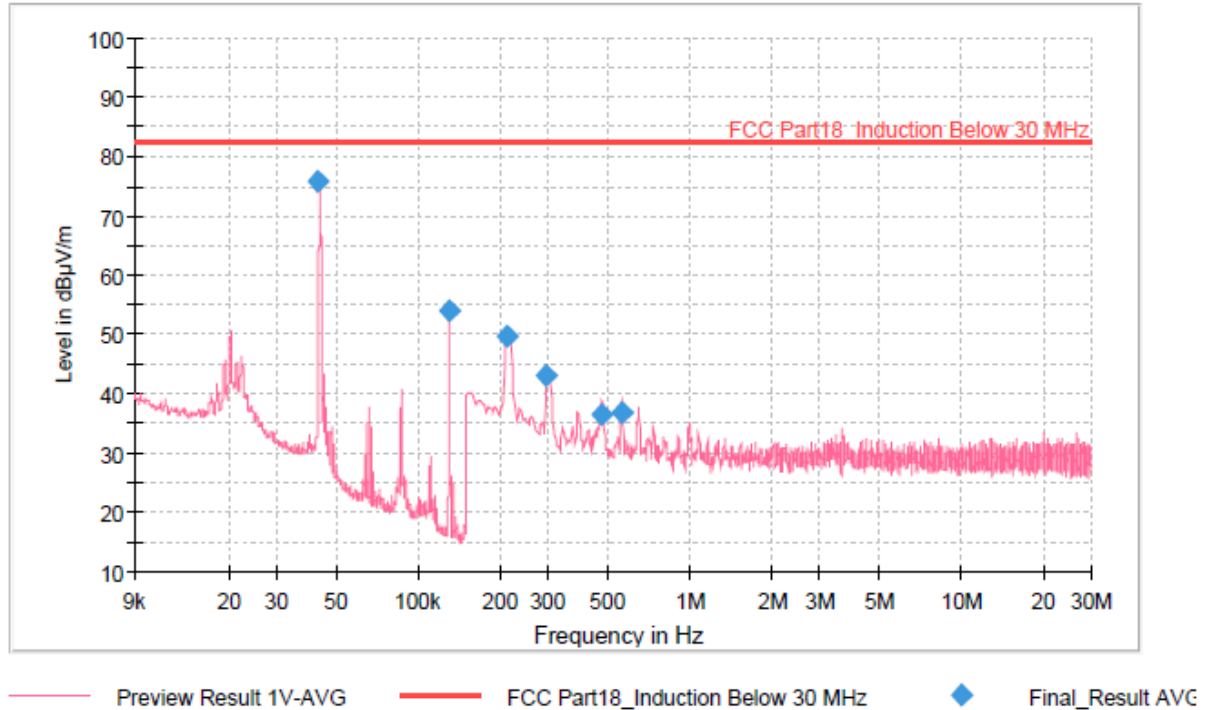
— Preview Result 1H-AVG — FCC Part18_Induction Below 30 MHz ◆ Final_Result AVC

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.042631	78.51	82.60	4.09	1000.0	0.200	H	94.0	20.1
0.127908	50.22	82.60	32.38	1000.0	0.200	H	48.0	20.0
0.209700	47.85	82.60	34.75	1000.0	9.000	H	186.0	20.0
0.299265	42.96	82.60	39.64	1000.0	9.000	H	9.0	20.0
0.382845	40.14	82.60	42.46	1000.0	9.000	H	31.0	20.0
0.470425	37.09	82.60	45.51	1000.0	9.000	H	43.0	20.0



Cooking Element #2_V

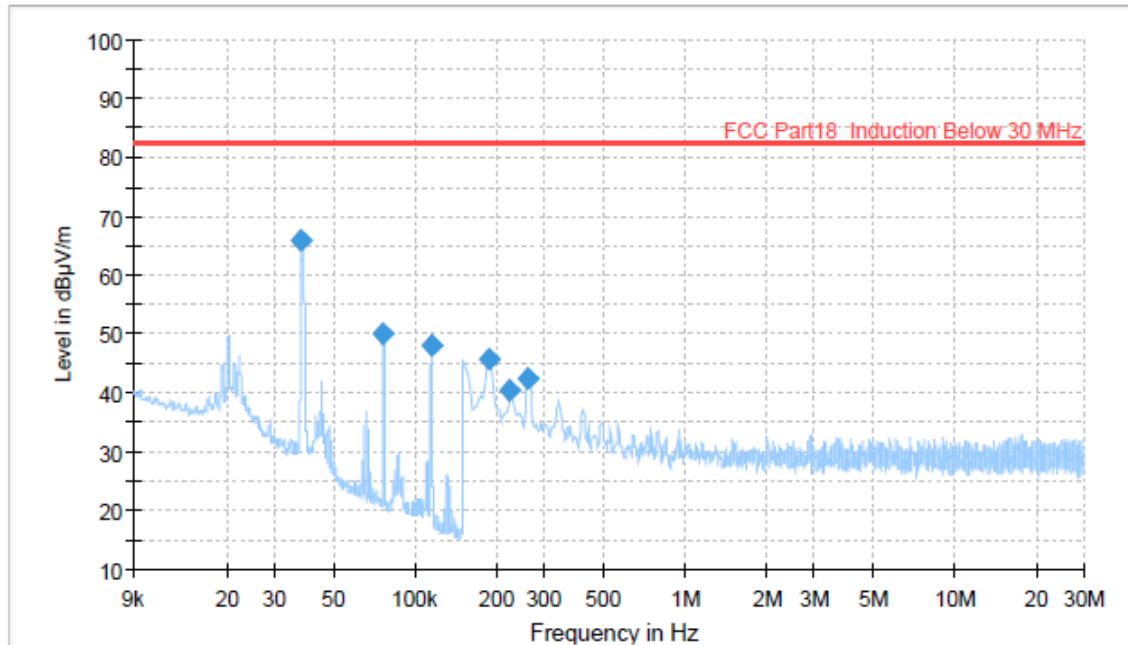


Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.042734	75.79	82.60	6.81	1000.0	0.200	V	37.0	20.1
0.130832	54.04	82.60	28.56	1000.0	0.200	V	50.0	20.0
0.212685	49.63	82.60	32.97	1000.0	9.000	V	210.0	20.0
0.297235	43.11	82.60	39.49	1000.0	9.000	V	198.0	20.0
0.475365	36.59	82.60	46.01	1000.0	9.000	V	275.0	20.0
0.558945	36.82	82.60	45.78	1000.0	9.000	V	198.0	20.0



Cooking Element #3_H



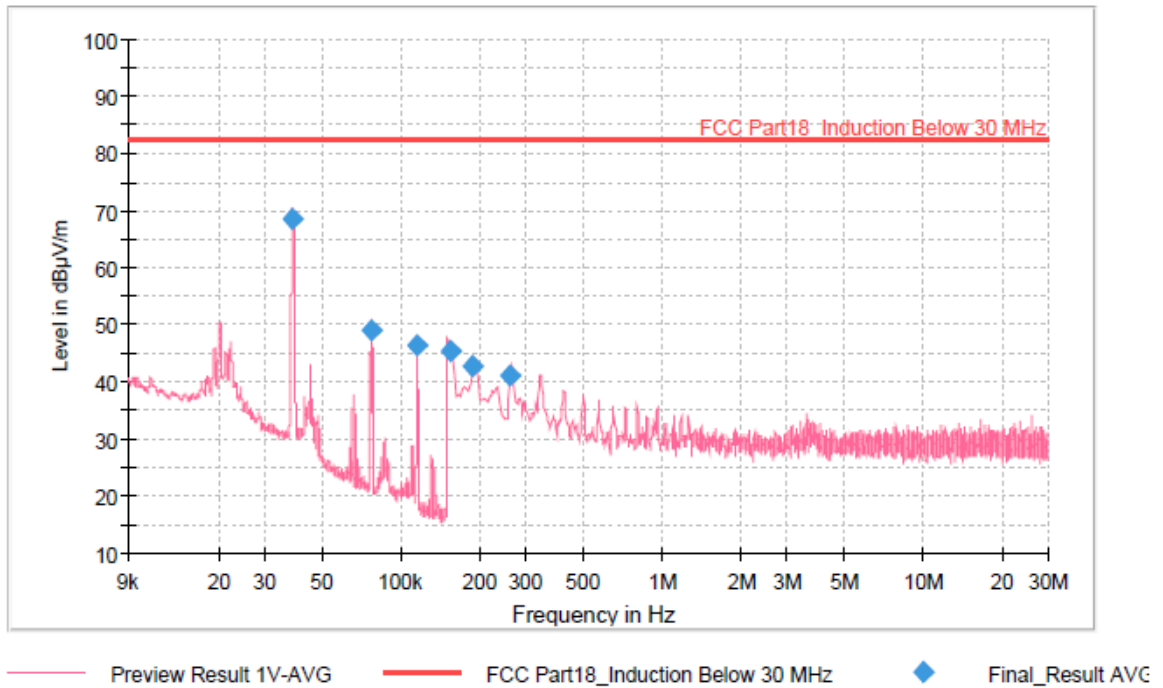
— Preview Result 1H-AVG — FCC Part18_Induction Below 30 MHz ◆ Final_Result AVC

Final Result

Frequency (MHz)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.037535	65.85	82.60	16.75	1000.0	0.200	H	174.0	20.1
0.075497	50.00	82.60	32.60	1000.0	0.200	H	133.0	20.0
0.114946	48.06	82.60	34.54	1000.0	0.200	H	320.0	20.0
0.186000	45.67	82.60	36.93	1000.0	9.000	H	174.0	20.0
0.222000	40.32	82.60	42.28	1000.0	9.000	H	335.0	20.0
0.262430	42.58	82.60	40.02	1000.0	9.000	H	186.0	20.0



Cooking Element #3_V

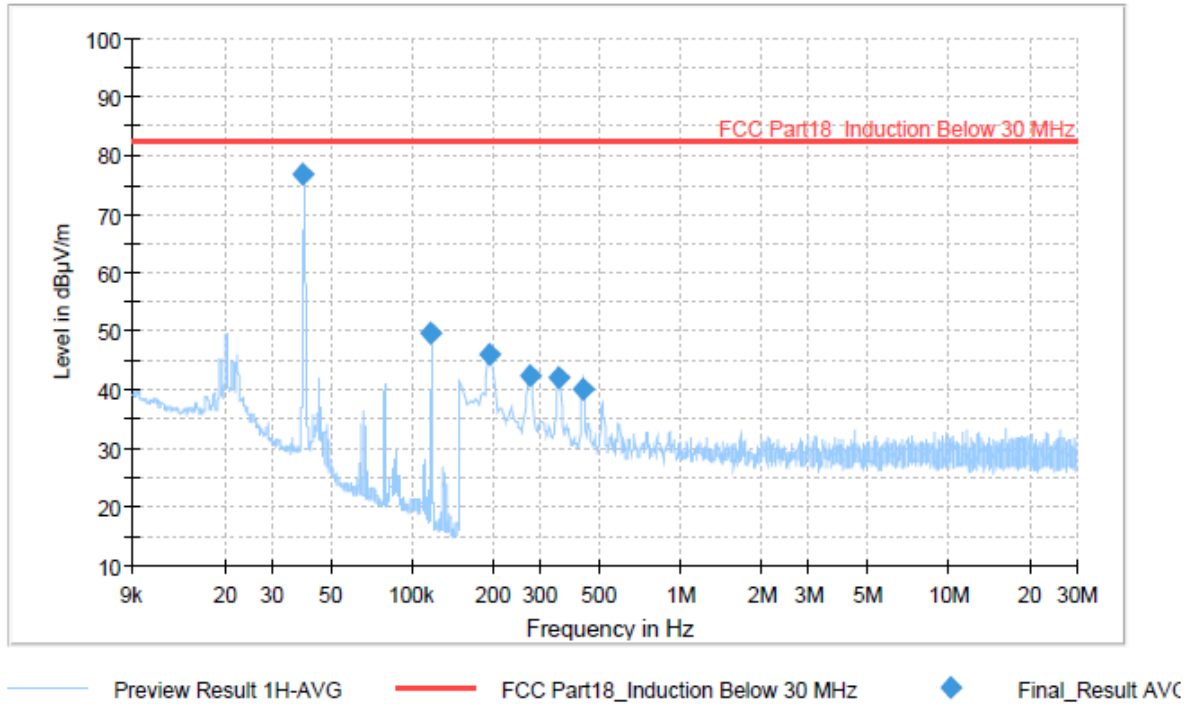


Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.038413	68.56	82.60	14.04	1000.0	0.200	V	270.0	20.1
0.076395	49.04	82.60	33.56	1000.0	0.200	V	225.0	20.0
0.114911	46.28	82.60	36.32	1000.0	0.200	V	217.0	20.0
0.154000	45.57	82.60	37.03	1000.0	9.000	V	40.0	20.0
0.186000	42.91	82.60	39.69	1000.0	9.000	V	100.0	20.0
0.261415	41.24	82.60	41.36	1000.0	9.000	V	64.0	20.0



Cooking Element #4_H

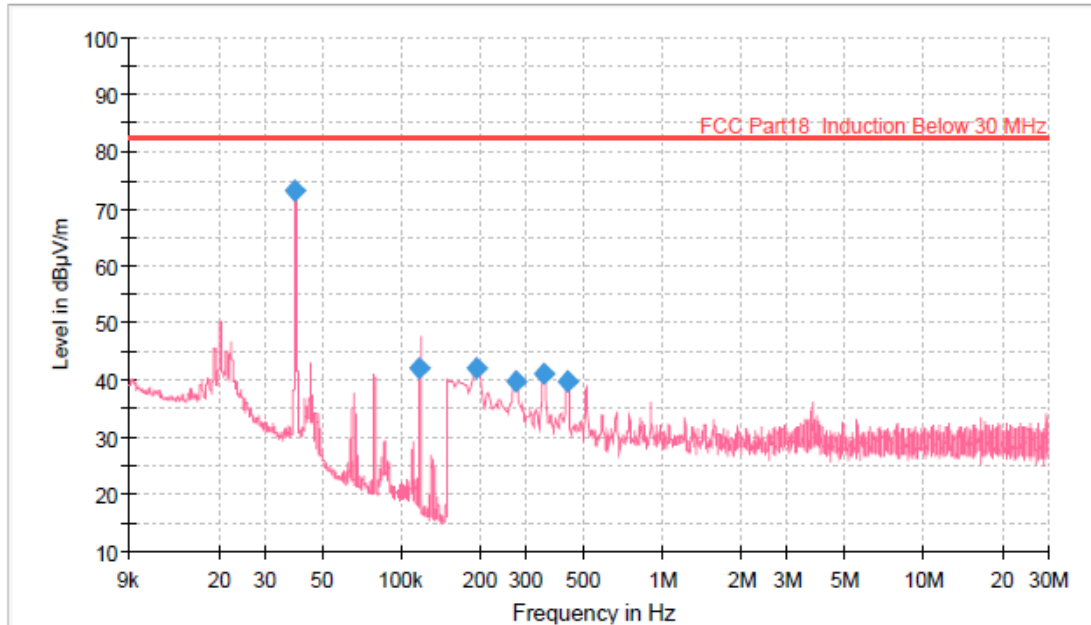


Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.039049	76.81	82.60	5.79	1000.0	0.200	H	193.0	20.1
0.117768	49.69	82.60	32.91	1000.0	0.200	H	180.0	20.0
0.194775	45.99	82.60	36.61	1000.0	9.000	H	224.0	20.0
0.275370	42.37	82.60	40.23	1000.0	9.000	H	216.0	20.0
0.352980	42.11	82.60	40.49	1000.0	9.000	H	224.0	20.0
0.430590	40.12	82.60	42.48	1000.0	9.000	H	193.0	20.0



Cooking Element #4_V



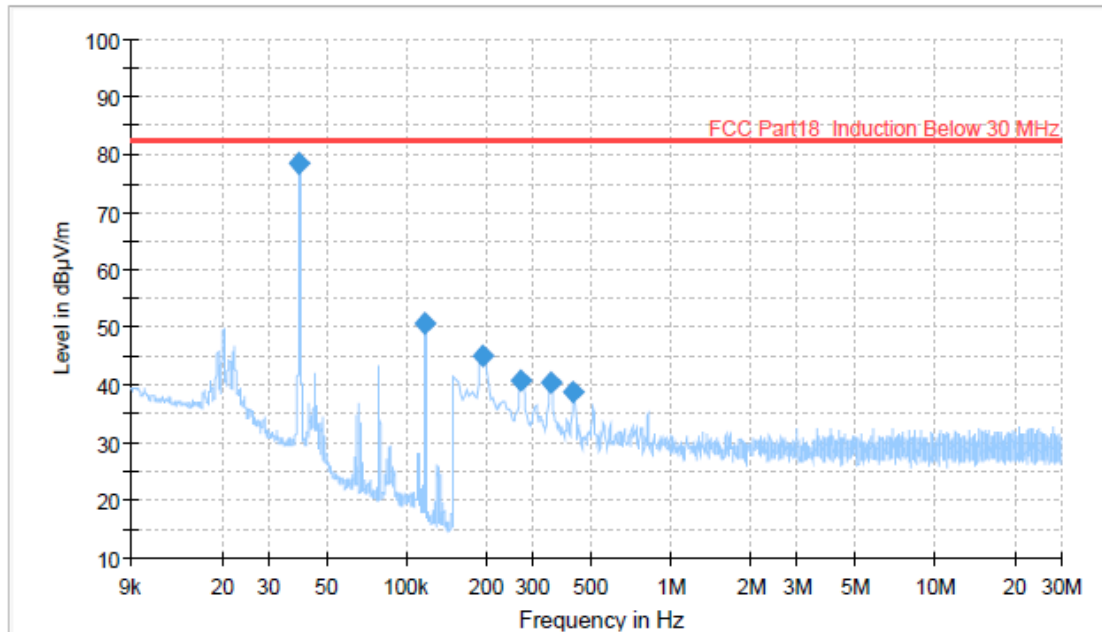
— Preview Result 1V-AVG — FCC Part18_Induction Below 30 MHz ◆ Final_Result AVG

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.038960	73.24	82.60	9.36	1000.0	0.200	V	114.0	20.1
0.117317	42.01	82.60	40.59	1000.0	0.200	V	81.0	20.0
0.194775	42.15	82.60	40.45	1000.0	9.000	V	290.0	20.0
0.274370	39.91	82.60	42.69	1000.0	9.000	V	163.0	20.0
0.352980	41.15	82.60	41.45	1000.0	9.000	V	351.0	20.0
0.430590	39.90	82.60	42.70	1000.0	9.000	V	318.0	20.0



Cooking Element #5_H



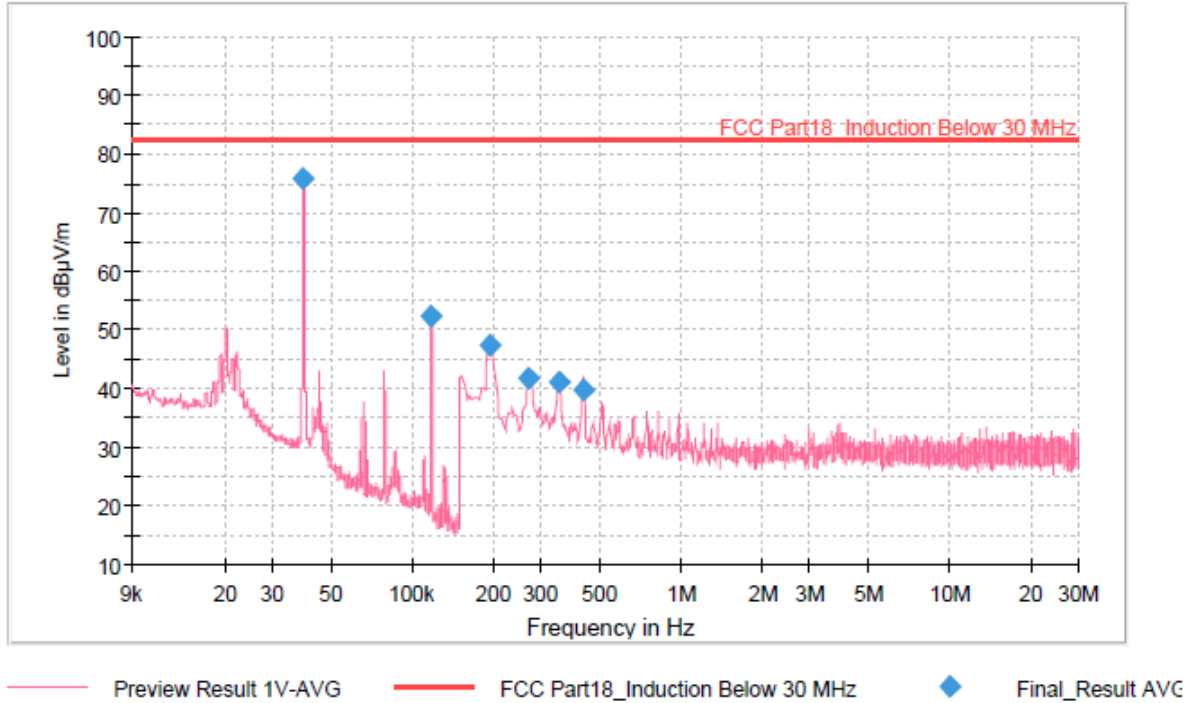
Preview Result 1H-AVG FCC Part18 Induction Below 30 MHz Final_Result AVC

Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.039153	78.48	82.60	4.12	1000.0	0.200	H	193.0	20.1
0.116753	50.74	82.60	31.86	1000.0	0.200	H	169.0	20.0
0.194000	45.10	82.60	37.50	1000.0	9.000	H	149.0	20.0
0.271385	40.71	82.60	41.89	1000.0	9.000	H	133.0	20.0
0.349995	40.32	82.60	42.28	1000.0	9.000	H	211.0	20.0
0.427605	38.86	82.60	43.74	1000.0	9.000	H	240.0	20.0



Cooking Element #5_V



Final Result

Frequency (MHz)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Meas. Time (ms)	Bandwidth (kHz)	Pol	Azimuth (deg)	Corr. (dB/m)
0.039167	75.94	82.60	6.66	1000.0	0.200	V	104.0	20.1
0.116838	52.24	82.60	30.36	1000.0	0.200	V	74.0	20.0
0.194000	47.23	82.60	35.37	1000.0	9.000	V	65.0	20.0
0.271385	41.67	82.60	40.93	1000.0	9.000	V	90.0	20.0
0.349950	41.06	82.60	41.54	1000.0	9.000	V	122.0	20.0
0.430590	39.70	82.60	42.90	1000.0	9.000	V	122.0	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: CBIH3613BE)** was complies with § 18.305 and 18.307 of the FCC Rules.

- The end -

