

Prüfbericht-Nr.: Test report no.:	CN23QD8F 001	Auftrags-Nr.: Order no.:	168425406	Seite 1 von 17 Page 1 of 17
Kunden-Referenz-Nr.: Client reference no.:	N/A	Auftragsdatum: Order date:	2023-05-05	
Auftraggeber: Client:	SRP Companies 85 Rio Grande Drive, Second Floor, Castle Rock, CO 80104, USA			
Prüfgegenstand: Test item:	3-in-1 Wireless Charger			
Bezeichnung / Typ-Nr.: Identification / Type no.:	EWL-23125-A-230421 (Trademark:  by 7-ELEVEN,  , )			
Auftrags-Inhalt: Order content:	Test Report			
Prüfgrundlage: Test specification:	CFR47 FCC Part 15: Subpart C Section 15.209 CFR47 FCC Part 15: Subpart C Section 15.215 CFR47 FCC Part 15: Subpart C Section 15.207			
Wareneingangsdatum: Date of sample receipt:	2023-05-16	Please refer to Photo Document		
Prüfmuster-Nr.: Test sample no.:	A003475304-001			
Prüfzeitraum: Testing period:	2023-05-24 - 2023-05-25			
Ort der Prüfung: Place of testing:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: Testing laboratory:	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: Test result*:	Pass			
geprüft von: tested by:	 Jonat han Li		genehmigt von: authorized by:	 Winni e Hou
Datum: Date:	2023-06-06		Ausstellungsdatum: Issue date:	2023-06-06
Stellung / Position:	Sachverständige(r)/Expert		Stellung / Position:	Sachverständige(r)/Expert
Sonstiges / Other:	FCC ID: 2ATF5-50638 Factory: HongKong Etech Groups Limited Nguyen Giap Industrial Complex, Nguyen Giap Commune, TuKy District, Hai Duong Province			
Zustand des Prüfgegenstandes bei Anlieferung: Condition of the test item at delivery:	Prüfmuster vollständig und unbeschädigt Test item complete and undamaged			
* Legende:	P(ass) = entspricht o.g. Prüfgrundlage(n)	F(ail) = entspricht nicht o.g. Prüfgrundlage(n)	N/A = nicht anwendbar	N/T = nicht getestet
* Legend:	P(ass) = passed a.m. test specification(s)	F(ail) = failed a.m. test specification(s)	N/A = not applicable	N/T = not tested
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the above mentioned test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

V05

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Anmerkungen
Remarks

1	Alle eingesetzten Prüfmittel waren zum angegebenen Prüfzeitraum gemäß eines festgelegten Kalibrierungsprogramms unseres Prüfhauses kalibriert. Sie entsprechen den in den Prüfprogrammen hinterlegten Anforderungen. Die Rückverfolgbarkeit der eingesetzten Prüfmittel ist durch die Einhaltung der Regelungen unseres Managementsystems gegeben. Detaillierte Informationen bezüglich Prüfkonditionen, Prüfequipment und Messunsicherheiten sind im Prüflabor vorhanden und können auf Wunsch bereitgestellt werden. <i>The equipment used during the specified testing period was calibrated according to our test laboratory calibration program. The equipment fulfils the requirements included in the relevant standards. The traceability of the test equipment used is ensured by compliance with the regulations of our management system. Detailed information regarding test conditions, equipment and measurement uncertainty is available in the test laboratory and could be provided on request.</i>
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3	Prüfklausel mit der Note * wurden an qualifizierte Unterauftragnehmer vergeben und sind unter der jeweiligen Prüfklausel des Berichts beschrieben. Abweichungen von Prüfspezifikation(en) oder Kundenanforderungen sind in der jeweiligen Prüfklausel im Bericht aufgeführt. <i>Test clauses with remark of * are subcontracted to qualified subcontractors and described under the respective test clause in the report.</i> <i>Deviations of testing specification(s) or customer requirements are listed in specific test clause in the report.</i>
4	Die Entscheidungsregel für Konformitätserklärungen basierend auf numerischen Messergebnissen in diesem Prüfbericht basiert auf der "Null-Grenzwert-Regel" und der "Einfachen Akzeptanz" gemäß ILAC G8:2019 und IEC Guide 115:2021, es sei denn, in der auf Seite 1 dieses Berichts genannten angewandten Norm ist etwas anderes festgelegt oder vom Kunden gewünscht. Dies bedeutet, dass die Messunsicherheit nicht berücksichtigt wird und daher auch nicht im Prüfbericht angegeben wird. Zu weiteren Informationen bezüglich des Risikos durch diese Entscheidungsregel siehe ILAC G8:2019. <i>The decision rule for statements of conformity, based on numerical measurement results, in this test report is based on the "Zero Guard Band Rule" and "Simple Acceptance" in accordance with ILAC G8:2019 and IEC Guide 115:2021, unless otherwise specified in the applied standard mentioned on Page 1 of this report or requested by the customer. This means that measurement uncertainty is not taken in account and hence also not declared in the test report. For additional information to the resulting risk based of this decision rule please refer to ILAC G8:2019.</i>

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Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 99% BANDWIDTH

RESULT: Pass

5.1.3 20dB BANDWIDTH

RESULT: Pass

5.1.4 RADIATED SPURIOUS EMISSION

RESULT: Pass

5.1.5 CONDUCTED EMISSION ON AC MAINS

RESULT: Pass

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1 General Remarks

1.1 Complementary Materials

All attachments are integral parts of this test report. This applies especially to the following appendix:

Appendix A: Test Results of FCC Part 15C

Appendix B: Photographs of the Test Set-up

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

No.362, Huanguan Middle Road, Songyuansha Community, Guanhu Subdistrict, Longhua District, Shenzhen 518110, Guangdong, China

FCC Accreditation Designation No.: CN1260

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing (TS8997)				
Equipment	Manufacturer	Model	Serial No.	Cal. until
Signal Analyzer	R&S	FSV 40	101441	2023-08-01
OSP	R&S	OSP 150	101017	2023-11-21
Control PC	DELL	OptiPlex 7050	FTJZ9P2	N/A
Test Software	R&S	WMS32 (V11.00.00)	N/A	N/A
Power Meter	R&S	NRP2	107105	2023-11-21
Wideband Power Sensor	R&S	NRP-Z81	105677	2023-08-01
Shielding Room 8#	Albatross	SR8	APC17151-SR8	2024-06-22
Unwanted Emission Testing (TS9975)				
Equipment	Manufacturer	Model	Serial No.	Cal. until
EMI Test Receiver	R&S	ESR 7	102021	2023-08-02
Signal Analyzer	R&S	FSV 40	101439	2023-08-01
System Controller Interface	R&S	SCI-100	S10010038	N/A
Filterbank	R&S	Wlan	100759	2023-08-01
OSP	R&S	OSP 120	102040	N/A
Pre-amplifier	R&S	SCU08F1	08320031	2023-08-02
Amplifier	R&S	SCU-18F	180070	2023-08-02
Amplifier	R&S	SCU40A	100475	2023-08-02
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	2024-08-06
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	2024-08-06
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	2024-08-27
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	2023-08-06
Test software	R&S	EMC32 (V10.60.10)	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	2024-06-22

Conducted Emission				
Description	Manufacturer	Model	Serial No.	Cal. Until
EMI Test Receiver	R&S	ESR3	102428	2023-07-31
Artificial Mains Network	R&S	ENV216	102333	2023-08-01
EMC32 test software	R&S	EMC32(Ver.10.50.00)	N/A	N/A

2.3 Traceability

All measurement equipment calibrations are traceable to NIM (National Institute of Metrology) or where calibration is performed in other countries, to equivalent nationally recognized standards organizations.

2.4 Calibration

Equipment requiring calibration is calibrated periodically by the manufacturer or according to manufacturer's specifications. Additionally all equipment is verified for proper performance on a regular basis using in house standards or comparisons.

2.5 Measurement Uncertainty

The estimated combined standard uncertainty for radiated emissions and conducted emissions measurements as below table

Table 2: Measurement Uncertainty

Parameter	Uncertainty (k=2)
Occupied Channel Bandwidth	$\pm 2.08 \%$
All emissions, radiated	$\pm 4.17 \text{ dB}$
Conducted Emission, (9kHz to 150kHz)/(150kHz to 30MHz)	$\pm 3.70 \text{ dB} / \pm 3.30 \text{ dB}$

2.6 Location of Original Data

The original copies of all test data taken during actual testing were attached at Appendix A & B of this report and delivered to the applicant. A copy has been retained in the TÜV Rheinland (Shenzhen) Co., Ltd. file for certification follow-up purposes.

2.7 Status of Facility Used for Testing

The TÜV Rheinland (Shenzhen) Co., Ltd. Test facility located at No.362, Huanguan Middle Road, Songyuansha Community, Guanhu Subdistrict, Longhua District, Shenzhen 518110, Guangdong, China is listed on the US Federal Communications Commission list of facilities approved to perform measurements.

3 General Product Information

3.1 Product Function and Intended Use

The EUT is a 3-in-1 Wireless Charger, which supports wireless charging (WPT) function.

For details refer to the User Manual, Technical Description and Circuit Diagram.

3.2 Ratings and System Details

Table 3: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment:	3-in-1 Wireless Charger
Type Designation:	EWL-23125-A-230421
Trademark:	  
FCC ID:	2ATF5-50638
Operating Voltage:	Type C operated (9Vdc, 3A)
Testing Voltage:	AC 120V, 60Hz
Technical Specification of WPT	
Frequency Range:	Mobile phone output: 115-205KHz Earbuds output: 115-205KHz Watch output: 320KHz
Type of Modulation:	FSK
Antenna Type:	Coil antenna
Antenna number:	3
Wireless output power:	Mobile phone output: 5W/7.5W/10W/15W Earbuds output: 5W Watch output: 2.5W

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Wireless charging
 - 1. Mobile phone output: 15W
 - 2. Earbuds output: 5W
 - 3. Watch output: 2.5W
 - 4. 15W+5W+2.5W
- B. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- Application Form

- Operation Description

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

Emission: The equipment under test (EUT) was configured to measure its highest possible radiation level. The test modes were adapted accordingly in reference to the instructions for use.

Radio Spectrum: The equipment under test (EUT) was configured at its highest power output in order to measure its highest possible radiation and conducted level. The test modes were adapted accordingly in reference to the instructions for use.

4.2 Test Operation and Test Software

Test operation refers to test setup in chapter 5 & 6. All testing were performed according to the procedures in ANSI C63.10: 2013.

According to clause 3.1, all tests were performed on model EWL-23125-A-230421 in this report.

4.3 Special Accessories and Auxiliary Equipment

Table 4: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
Adapter	MI	MDY-10-EX	N/A	Output: DC 9V, 3A
Adapter	HUAWEI	HW-100225C00	HC78EAM4W03196	Output: DC 9V, 3A
Dummy Load 1#	YBZ	N/A	N/A	N/A
Dummy Load 2#	YBZ	N/A	N/A	N/A
Watch	Apple	N/A	N/A	N/A

4.4 Countermeasures to Achieve EMC Compliance

The test sample which has been tested contained the noise suppression parts as described in the Technical Construction File (TCF).

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

Diagram of Measurement Configuration for Radiation Test (Below 30MHz)

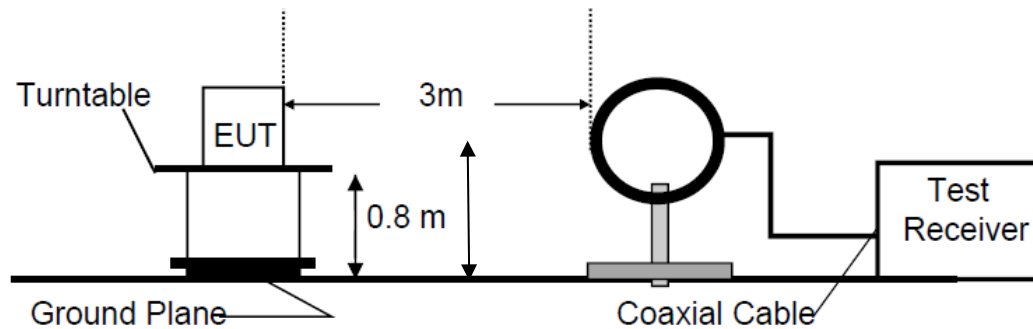


Diagram of Measurement Configuration for Radiation Test (Below 1GHz)

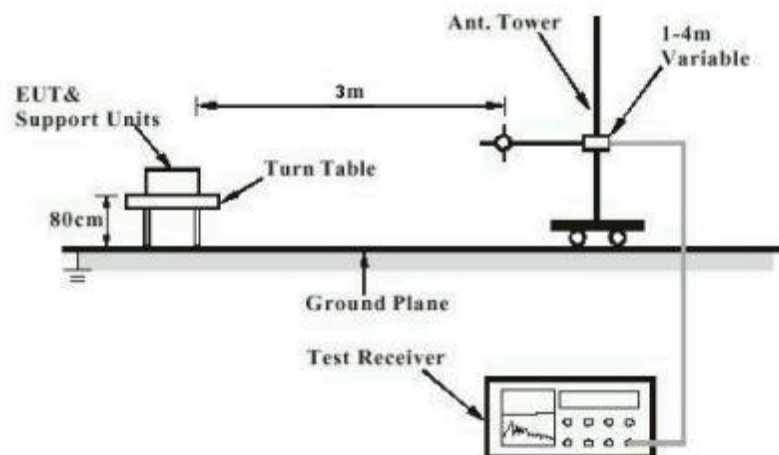
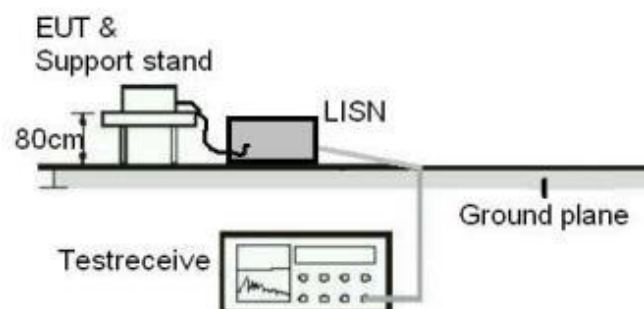


Diagram of Measurement Configuration for Mains Conduction Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:

Pass

Test Specification

Test standard : Part 15.203

According to the manufacturer declared, the EUT has three internal antenna, and the antenna is permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

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5.1.2 99% Bandwidth

RESULT:

Pass

Test Specification

Basic standard : ANSI C63.10: 2013
Kind of test site : Shielded Room

Test Setup

Date of testing : 2023-05-24
Input voltage : AC 120V, 60Hz
Operation mode : A
Ambient temperature : 23 °C
Relative humidity : 56 %
Atmospheric pressure : 101 kPa

For the measurement records, refer to the appendix A.

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5.1.3 20dB Bandwidth

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.215(c)
Basic standard	: ANSI C63.10: 2013
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2023-05-24
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Ambient temperature	: 23 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

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5.1.4 Radiated Spurious Emission

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.209 & 15.205
Basic standard	: ANSI C63.10: 2013
Limits	: Refer to 15.209(a)
Kind of test site	: 3m Semi-anechoic Chamber

Test Setup

Date of testing	: 2023-05-24
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Ambient temperature	: 23 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

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5.1.5 Conducted Emission on AC Mains

RESULT:

Pass

Test Specification

Test standard	: FCC Part 15.207
Basic standard	: ANSI C63.10: 2013
Frequency range	: 150KHz - 30MHz
Limits	: FCC Part 15.207(a)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2023-05-25
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Earthing	: Not connected
Ambient temperature	: 24.3 °C
Relative humidity	: 52.4 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix A.

6 Photographs of the Test Set-Up

For photographs of the test set-up, refer to the appendix B.

7 List of Tables

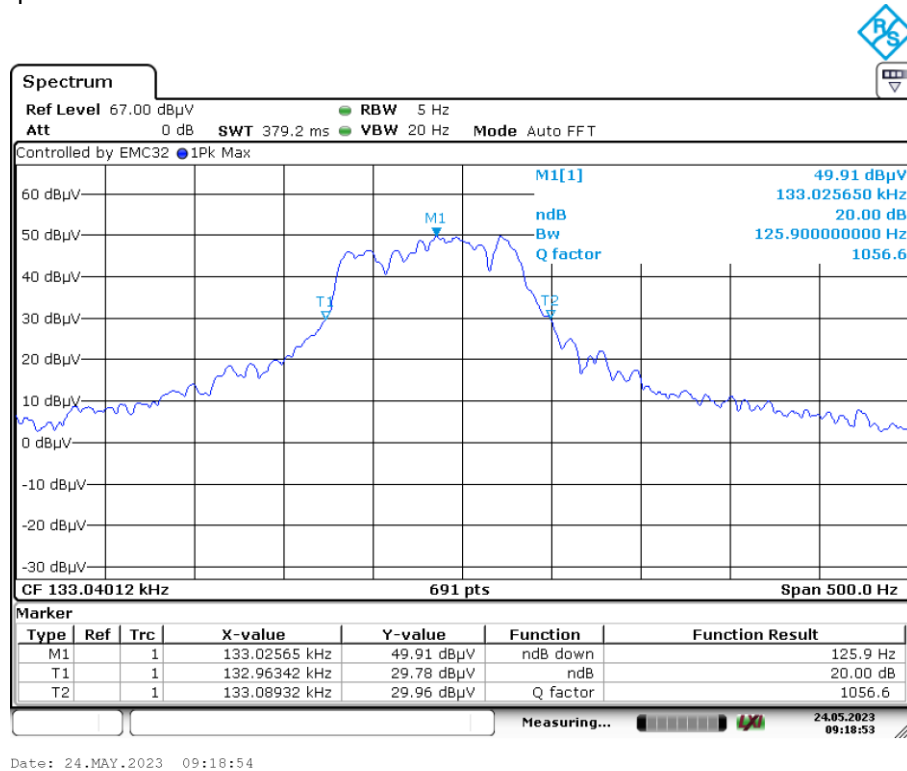
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Appendix A: Test Results of FCC Part 15C

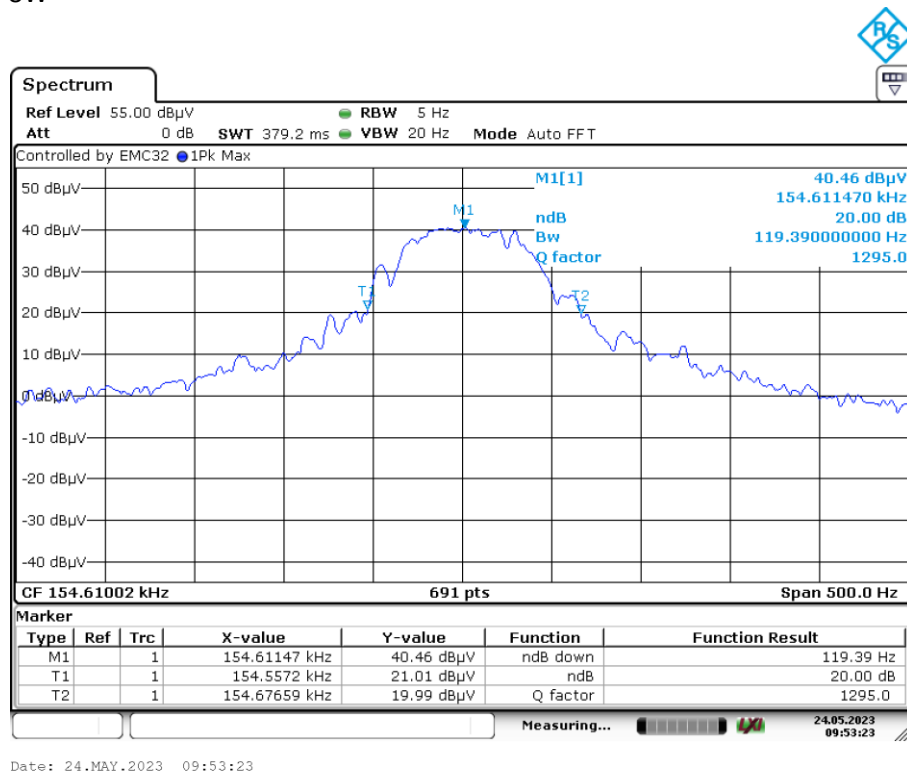
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Appendix A.1: Test Results of 20dB Bandwidth

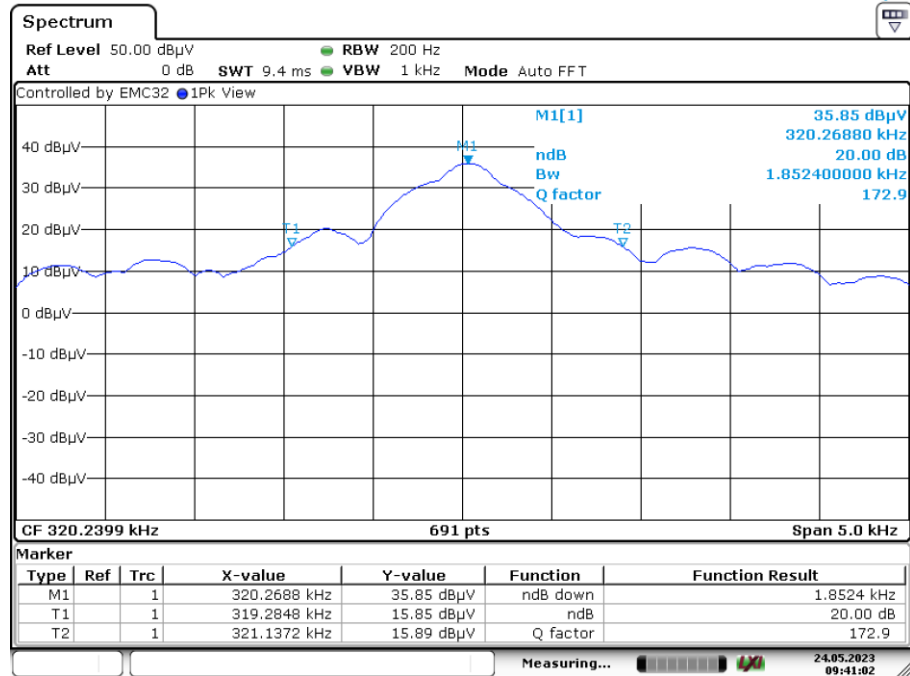
Mobile phone output: 15W



Earbuds output: 5W



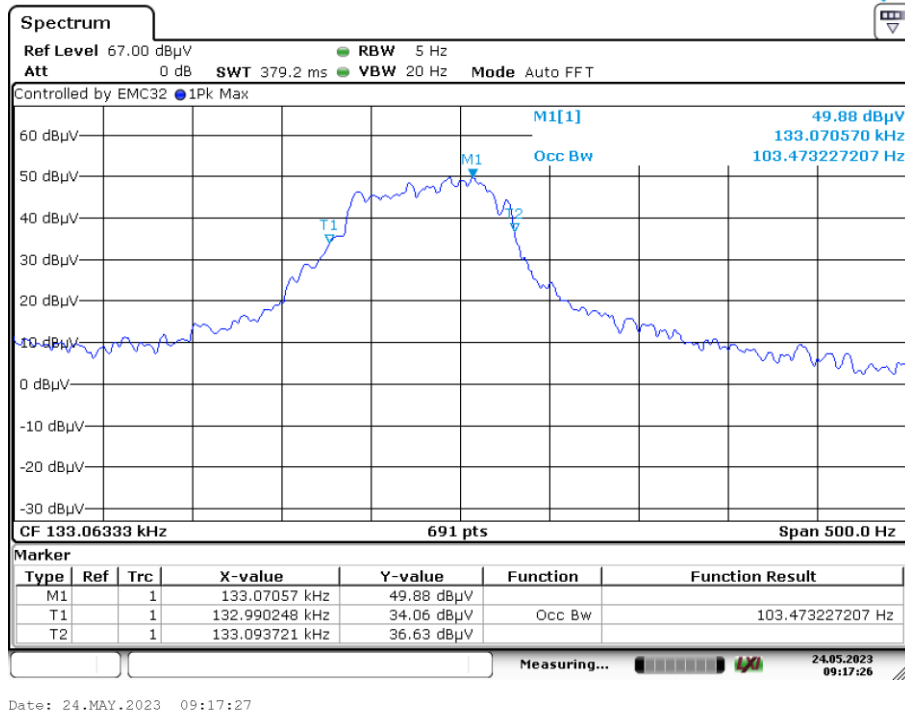
Watch output :2.5W



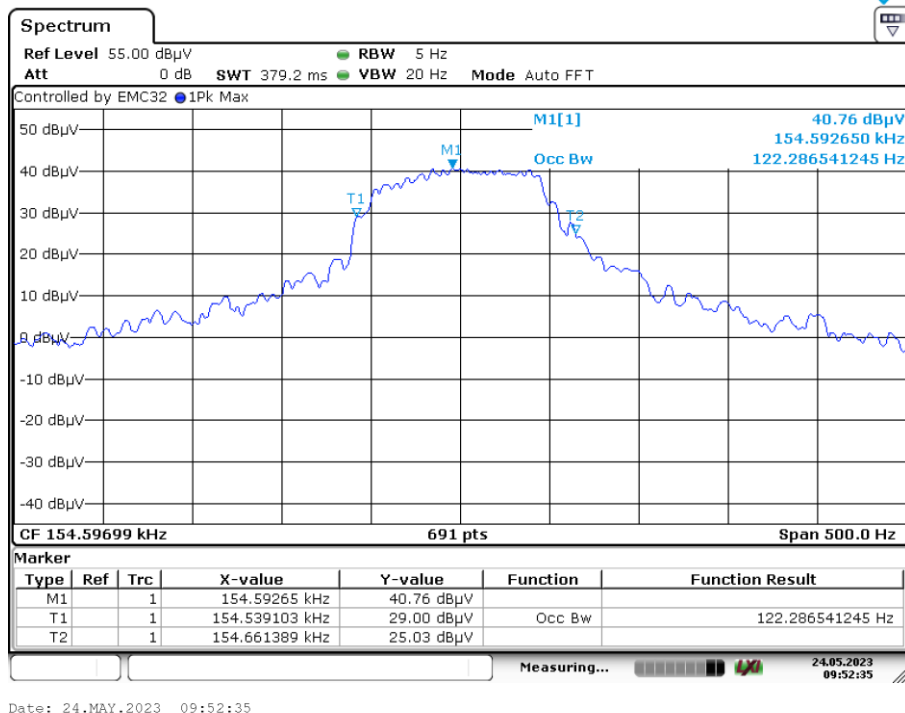
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Appendix A.2: Test Results of 99% Bandwidth

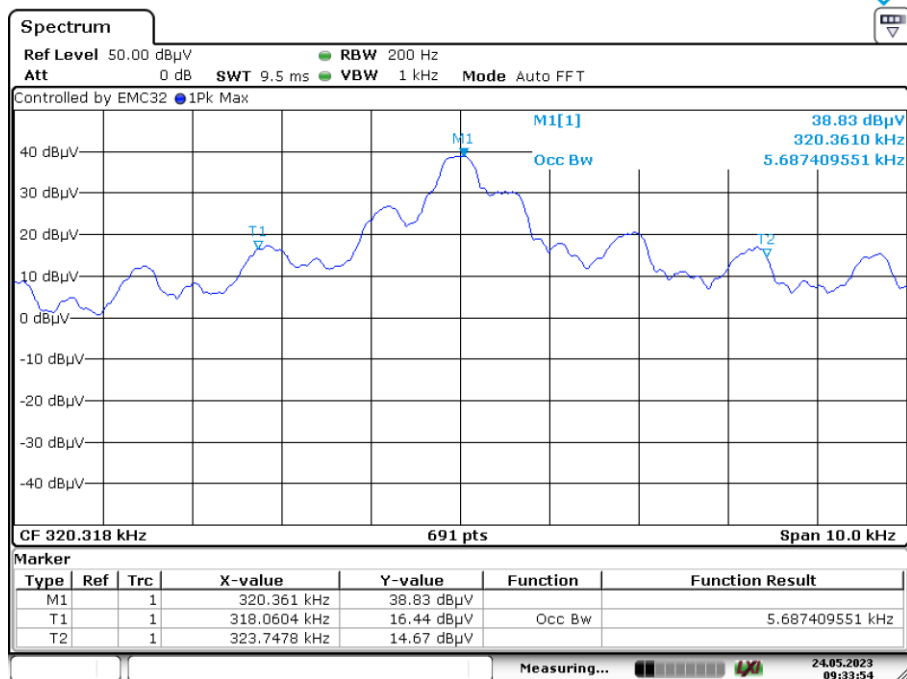
Mobile phone output: 15W



Earbuds output: 5W



Watch output: 2.5W



Date: 24.MAY.2023 09:33:54

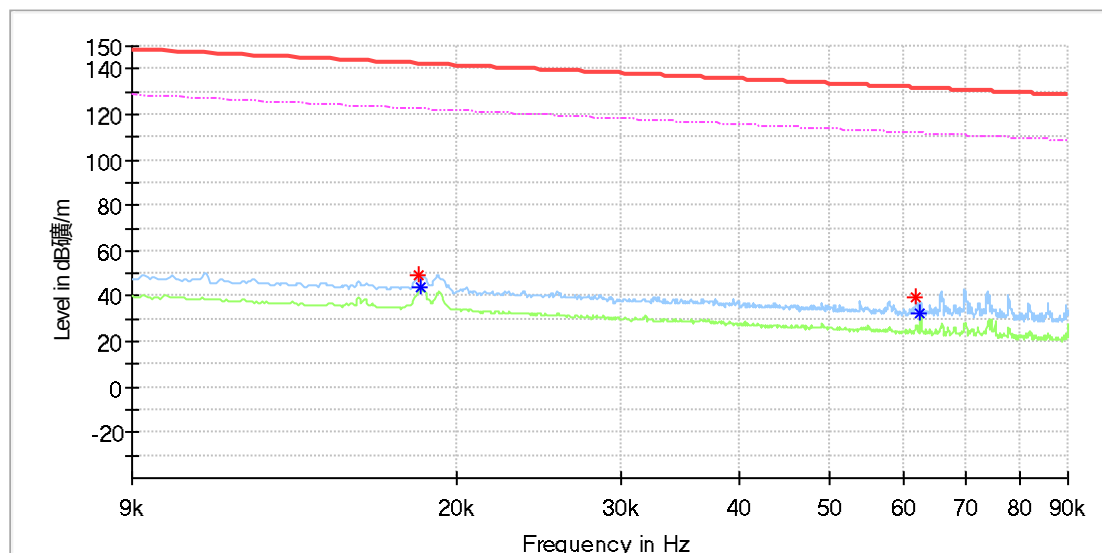
Appendix A.3: Test Results of Radiated Spurious Emission

Note: The highest waveform in the figure is Fundamental, the result of worst case mode(15W+5W+2.5W) was shown in this report.

9kHz - 90KHz

EUT Information

EUT Name:	3-in-1 Wireless Charger
Model:	EWL-23125-A-230421
Test Mode:	Charging (15W+5W+2.5W)
Order No/Sample No:	168425406/A003475304-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

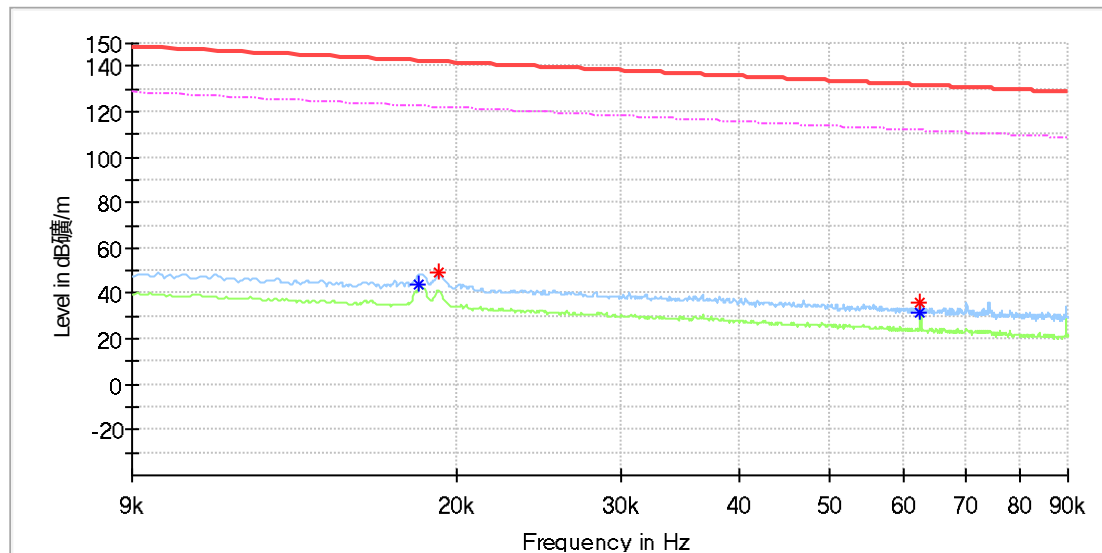


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.018257	49.18	---	142.36	93.18	100.0	X	237.0	20.0
0.018315	---	44.33	122.33	78.00	100.0	X	171.0	20.0
0.061881	39.40	---	131.76	92.36	100.0	X	74.0	20.0
0.062634	---	32.79	111.66	78.87	100.0	X	204.0	20.0

EUT Information

EUT Name: 3-in-1 Wireless Charger
Model: EWL-23125-A-230421
Test Mode: Charging (15W+5W+2.5W)
Order No/Sample No: 168425406/A003475304-001
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC Part 15C
Tested By: Kei Zhang
Reviewed By: Terry Yin

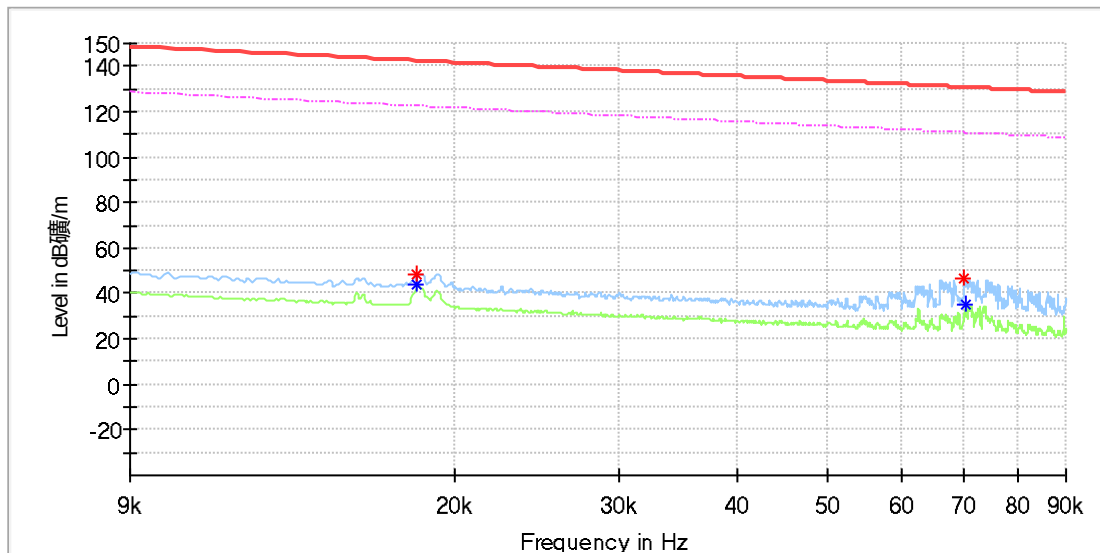


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.018257	---	43.84	122.36	78.52	100.0	Y	59.0	20.0
0.019125	48.87	---	141.96	93.09	100.0	Y	67.0	20.0
0.062634	36.29	---	131.66	95.37	100.0	Y	2.0	20.0
0.062634	---	31.89	111.66	79.77	100.0	Y	2.0	20.0

EUT Information

EUT Name: 3-in-1 Wireless Charger
Model: EWL-23125-A-230421
Test Mode: Charging (15W+5W+2.5W)
Order No/Sample No: 168425406/A003475304-001
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC Part 15C
Tested By: Kei Zhang
Reviewed By: Terry Yin



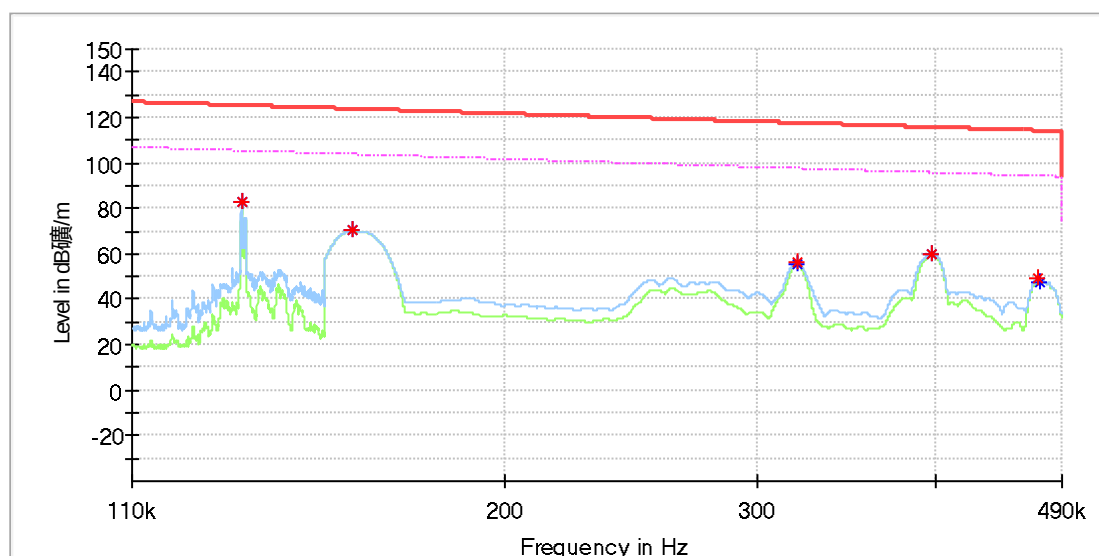
Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.018257	48.63	---	142.36	93.73	100.0	Z	212.0	20.0
0.018257	---	43.78	122.36	78.58	100.0	Z	212.0	20.0
0.070097	46.72	---	130.68	83.96	100.0	Z	94.0	20.0
0.070271	---	35.33	110.66	75.33	100.0	Z	125.0	20.0

110KHz - 490KHz

EUT Information

EUT Name:	3-in-1 Wireless Charger
Model:	EWL-23125-A-230421
Test Mode:	Charging (15W+5W+2.5W)
Order No/Sample No:	168425406/A003475304-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

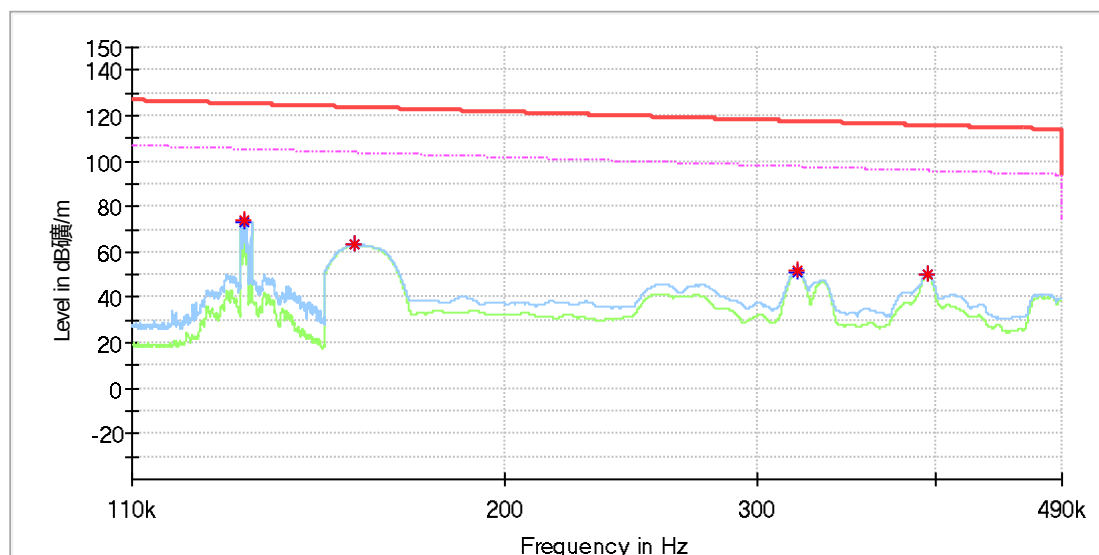


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.131200	82.75	---	125.24	42.49	100.0	X	94.0	20.0
0.131200	---	82.50	105.24	22.74	100.0	X	94.0	20.0
0.156750	70.30	---	123.69	53.39	100.0	X	16.0	20.0
0.156850	---	70.17	103.69	33.52	100.0	X	16.0	20.0
0.319950	56.24	---	117.50	61.26	100.0	X	49.0	20.0
0.320150	---	55.27	97.50	42.23	100.0	X	49.0	20.0
0.396900	59.97	---	115.63	55.66	100.0	X	105.0	20.0
0.396900	---	59.58	95.63	36.05	100.0	X	105.0	20.0
0.470950	48.88	---	114.14	65.27	100.0	X	16.0	20.0
0.472950	---	47.61	94.11	46.50	100.0	X	23.0	20.0

EUT Information

EUT Name: 3-in-1 Wireless Charger
 Model: EWL-23125-A-230421
 Test Mode: Charging (15W+5W+2.5W)
 Order No/Sample No: 168425406/A003475304-001
 Test Voltage: 120V/60Hz
 Remark: Temp 23 Humi:56%
 Test Standard: FCC Part 15C
 Tested By: Kei Zhang
 Reviewed By: Terry Yin

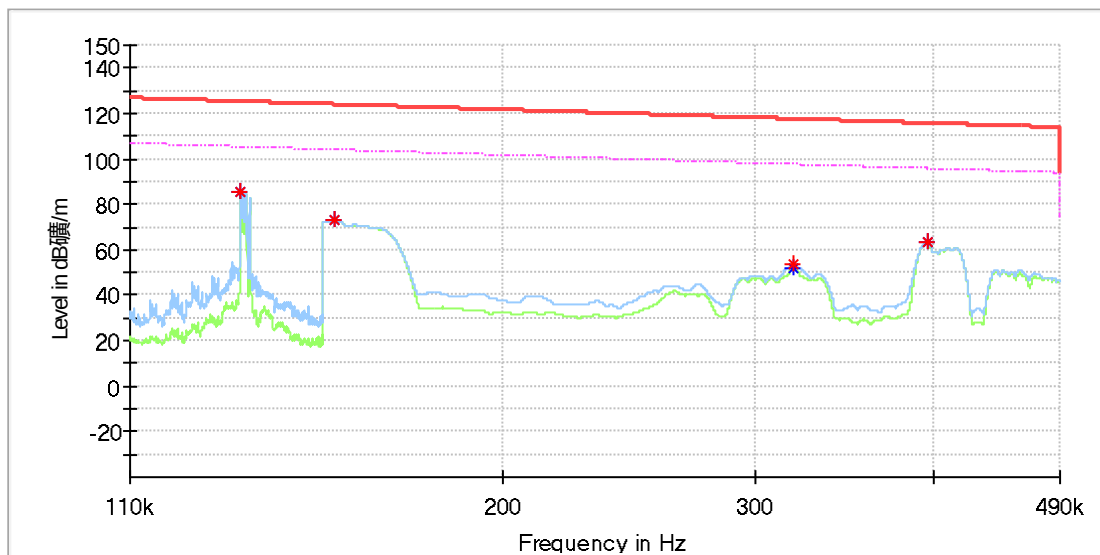


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.131886	73.62	---	125.19	51.57	100.0	Y	169.0	20.0
0.131886	---	73.43	105.19	31.77	100.0	Y	169.0	20.0
0.157250	63.23	---	123.67	60.44	100.0	Y	305.0	20.0
0.157300	---	63.12	103.66	40.55	100.0	Y	305.0	20.0
0.319950	---	51.39	97.50	46.11	100.0	Y	305.0	20.0
0.320050	51.82	---	117.50	65.68	100.0	Y	305.0	20.0
0.394500	---	49.71	95.68	45.98	100.0	Y	177.0	20.0
0.394950	50.19	---	115.67	65.48	100.0	Y	177.0	20.0

EUT Information

EUT Name: 3-in-1 Wireless Charger
Model: EWL-23125-A-230421
Test Mode: Charging (15W+5W+2.5W)
Order No/Sample No: 168425406/A003475304-001
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC Part 15C
Tested By: Kei Zhang
Reviewed By: Terry Yin



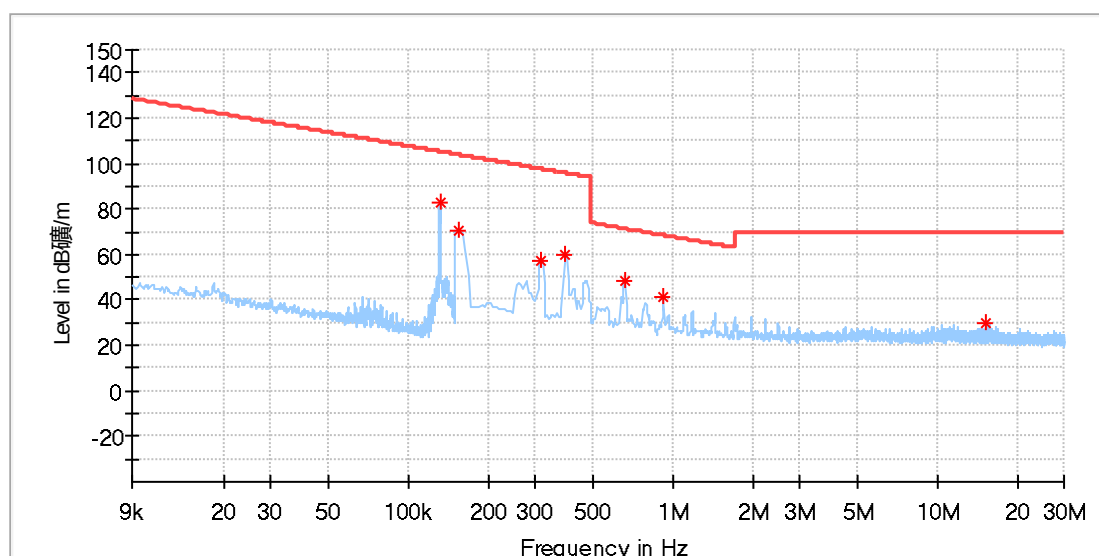
Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.131457	85.74	---	125.22	39.49	100.0	Z	93.0	20.0
0.131486	---	85.56	105.22	19.66	100.0	Z	93.0	20.0
0.152600	---	72.95	103.93	30.97	100.0	Z	338.0	20.0
0.152600	73.01	---	123.93	50.92	100.0	Z	338.0	20.0
0.319000	53.47	---	117.53	64.06	100.0	Z	219.0	20.0
0.319600	---	51.82	97.51	45.69	100.0	Z	219.0	20.0
0.395600	63.17	---	115.66	52.48	100.0	Z	88.0	20.0
0.395600	---	62.99	95.66	32.67	100.0	Z	88.0	20.0

9KHz – 30MHz

EUT Information

EUT Name:	3-in-1 Wireless Charger
Model:	EWL-23125-A-230421
Test Mode:	Charging (15W+5W+2.5W)
Order No./Sample No:	168425406/A003475304-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

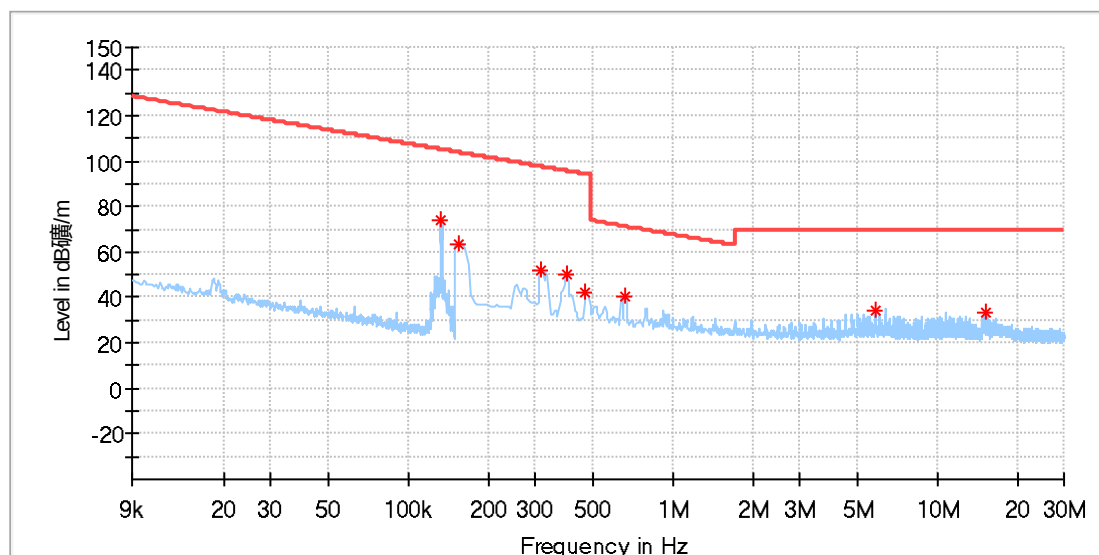
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.131066	82.74	105.25	22.51	100.0	X	93.0	20.1
0.154390	70.55	103.83	33.28	100.0	X	21.0	20.1
0.316809	57.47	97.59	40.11	100.0	X	6.0	20.1
0.391434	59.99	95.75	35.76	100.0	X	87.0	20.1
0.654816	48.72	71.29	22.57	100.0	X	82.0	20.1
0.918199	41.36	68.36	27.00	100.0	X	71.0	20.1
15.294485	29.73	69.50	39.77	100.0	X	359.0	20.5

Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name: 3-in-1 Wireless Charger
 Model: EWL-23125-A-230421
 Test Mode: Charging (15W+5W+2.5W)
 Order No/Sample No: 168425406/A003475304-001
 Test Voltage: 120V/60Hz
 Remark: Temp 23 Humi:56%
 Test Standard: FCC Part 15C
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

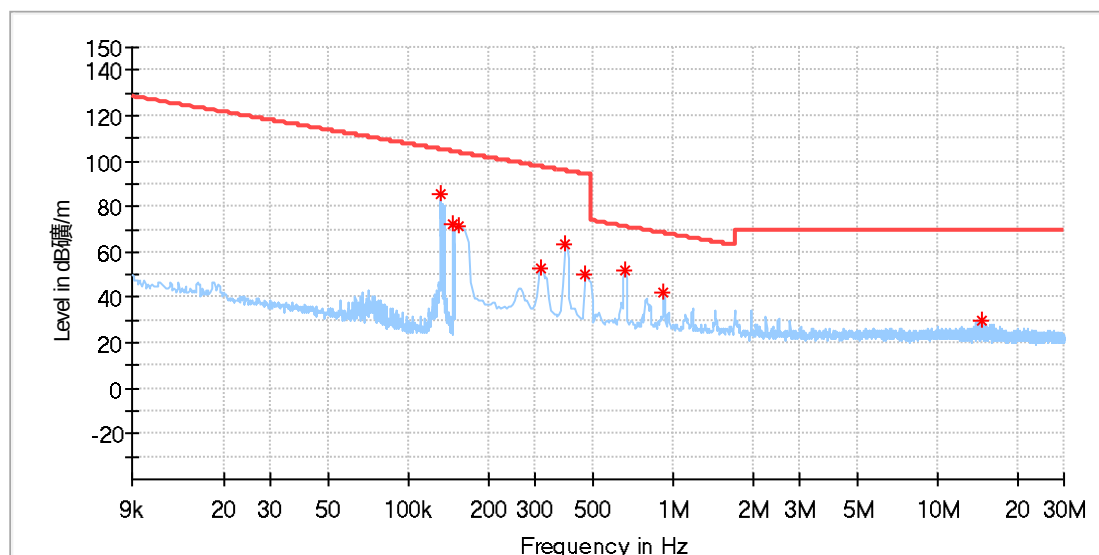
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.131569	73.65	105.22	31.56	100.0	Y	173.0	20.1
0.154390	63.54	103.83	40.29	100.0	Y	301.0	20.1
0.316809	51.58	97.59	46.01	100.0	Y	271.0	20.1
0.395824	49.94	95.65	45.71	100.0	Y	172.0	20.1
0.466059	42.09	94.24	52.14	100.0	Y	313.0	20.1
0.659206	40.08	71.23	31.15	100.0	Y	168.0	20.1
5.781993	34.31	69.50	35.19	100.0	Y	59.0	20.3
15.105728	33.21	69.50	36.29	100.0	Y	59.0	20.5

Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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EUT Information

EUT Name: 3-in-1 Wireless Charger
 Model: EWL-23125-A-230421
 Test Mode: Charging (15W+5W+2.5W)
 Order No/Sample No: 168425406/A003475304-001
 Test Voltage: 120V/60Hz
 Remark: Temp 23 Humi:56%
 Test Standard: FCC Part 15C
 Tested By: Kei Zhang
 Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
0.131871	85.71	105.20	19.48	100.0	Z	97.0	20.1
0.147784	72.26	104.21	31.94	100.0	Z	319.0	20.1
0.154390	71.23	103.83	32.60	100.0	Z	343.0	20.1
0.316809	52.81	97.59	44.78	100.0	Z	71.0	20.1
0.391434	63.24	95.75	32.51	100.0	Z	82.0	20.1
0.466059	50.21	94.24	44.02	100.0	Z	327.0	20.1
0.654816	51.82	71.29	19.47	100.0	Z	76.0	20.1
0.922588	42.39	68.32	25.93	100.0	Z	57.0	20.1
14.636030	29.91	69.50	39.59	100.0	Z	347.0	20.5

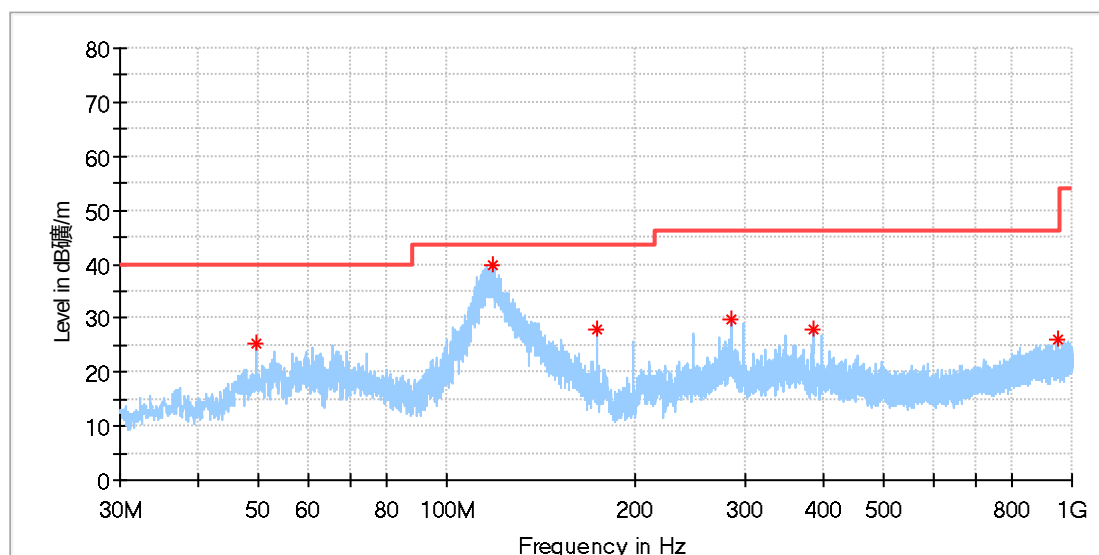
Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
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30MHz - 1GHz

EUT Information

EUT Name:	3-in-1 Wireless Charger
Model:	EWL-23125-A-230421
Test Mode:	Charging (15W+5W+2.5W)
Order No/Sample No:	168425406/A003475304-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC Part 15C
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

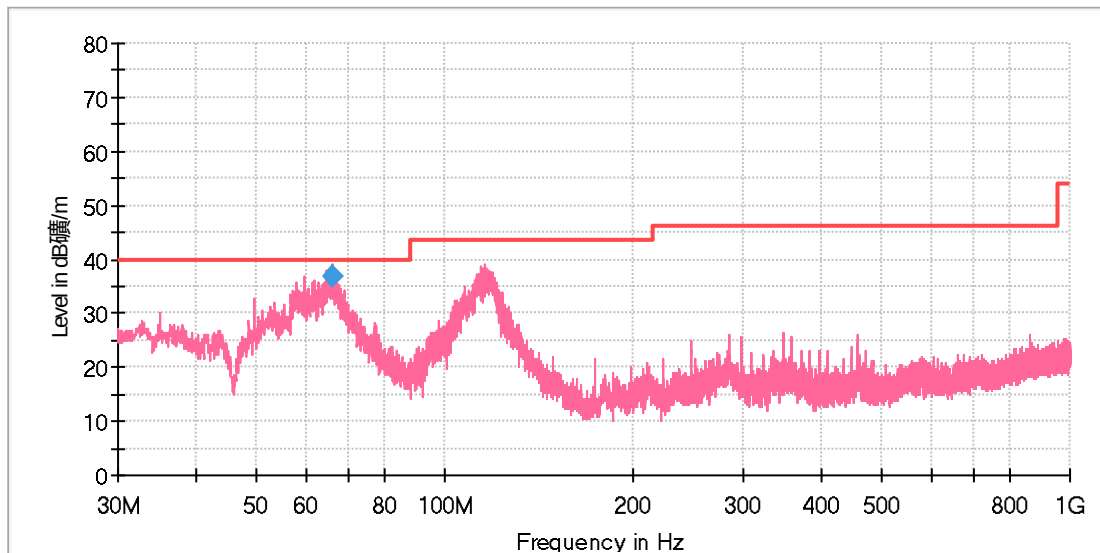
Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.586539	25.17	40.00	14.83	100.0	H	27.0	-18.6
118.008846	39.95	43.50	3.55	100.0	H	65.0	-20.7
173.560000	28.02	43.50	15.48	100.0	H	137.0	-21.4
285.371154	29.95	46.00	16.05	100.0	H	0.0	-17.0
384.646923	27.97	46.00	18.03	100.0	H	49.0	-14.5
952.208846	25.90	46.00	20.10	100.0	H	177.0	-4.8

Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
---	---	---	---	---		---	---

EUT Information

EUT Name: 3-in-1 Wireless Charger
Model: EWL-23125-A-230421
Test Mode: Charging (15W+5W+2.5W)
Order No/Sample No: 168425406/A003475304-001
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC Part 15C
Tested By: Kei Zhang
Reviewed By: Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
66.033346	39.25	40.00	0.75	100.0	V	351.0	-20.8
115.845000	39.25	43.50	4.25	100.0	V	184.0	-20.2
285.035385	26.14	46.00	19.86	100.0	V	326.0	-17.0
458.814615	26.12	46.00	19.88	100.0	V	10.0	-13.1
860.021539	25.87	46.00	20.13	100.0	V	271.0	-5.8

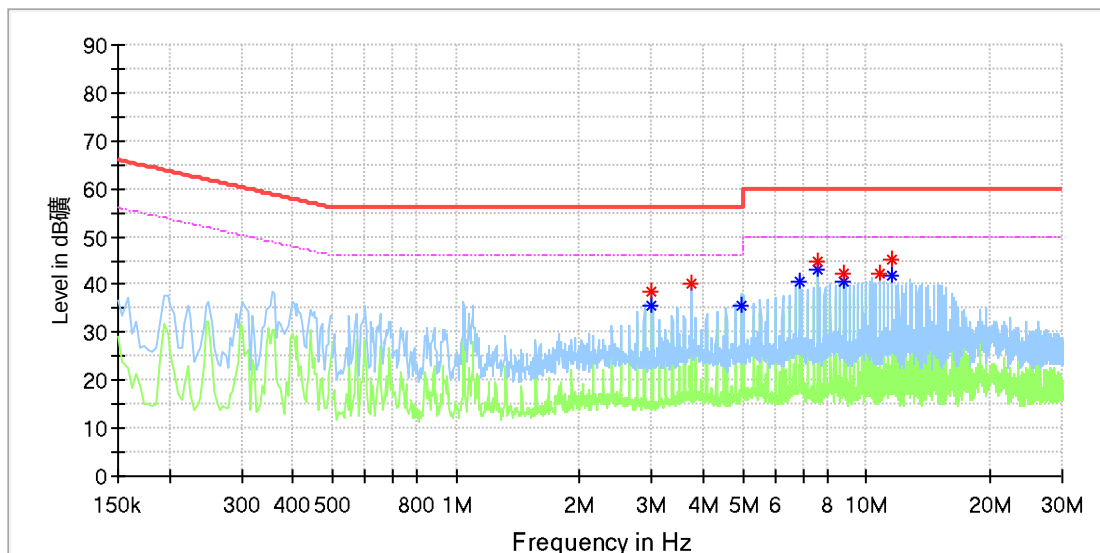
Final Result

Frequency (MHz)	QuasiPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
66.033346	36.88	40.00	3.12	100.0	V	351.0	-20.8

Appendix A.4: Test Results of Conducted Emission on AC Mains

EUT Information

EUT Name: 3-in-1 Wireless Charger
Order Number: 168425406_30
Model: EWL-23125-A-230421
Test Mode: On, Charging (15W+5W+2.5W)
Test Voltage: AC 120V, 60Hz
Test By./Review By: Eric Guo/Gary Chen
Test Standard: FCC Part 15
Tem./Hum./Pressure: 24.3°C/52.4%/101kPa
Remark: SR1

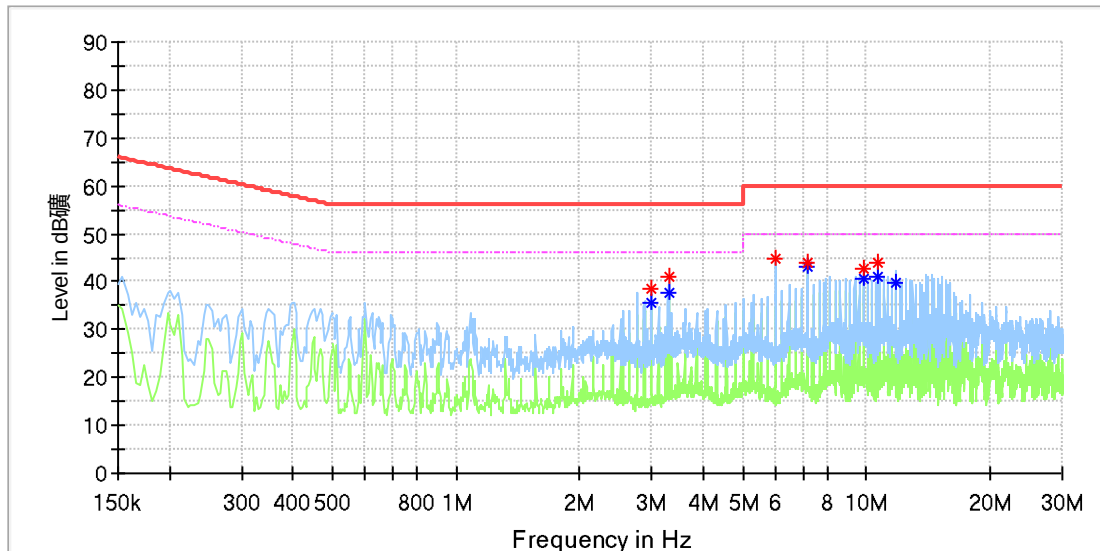


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
2.996000	38.58	---	56.00	17.42	L1	9.9
2.996000	---	35.44	46.00	10.56	L1	9.9
3.744000	40.08	---	56.00	15.92	L1	10.0
4.940000	---	35.63	46.00	10.37	L1	10.0
6.888000	---	40.73	50.00	9.27	L1	9.9
7.636000	---	43.20	50.00	6.80	L1	9.9
7.636000	44.60	---	60.00	15.40	L1	9.9
8.836000	42.19	---	60.00	17.81	L1	9.9
8.836000	---	40.79	50.00	9.21	L1	9.9
10.788000	42.40	---	60.00	17.60	L1	10.0
11.532000	45.32	---	60.00	14.68	L1	10.0
11.532000	---	41.89	50.00	8.11	L1	10.0

EUT Information

EUT Name: 3-in-1 Wireless Charger
Order Number: 168425406_30
Model: EWL-23125-A-230421
Test Mode: On, Charging (15W+5W+2.5W)
Test Voltage: AC 120V, 60Hz
Test By:/Review By: Eric Guo/Gary Chen
Test Standard: FCC Part 15
Tem./Hum./Pressure: 24.3°C/52.4%/101kPa
Remark: SR1



Critical Freqs

Frequency (MHz)	MaxPeak (dBμV)	Average (dBμV)	Limit (dBμV)	Margin (dB)	Line	Corr. (dB)
2.996000	38.52	---	56.00	17.48	N	10.0
2.996000	---	35.68	46.00	10.32	N	10.0
3.292000	41.05	---	56.00	14.95	N	10.0
3.292000	---	37.69	46.00	8.31	N	10.0
5.984000	44.62	---	60.00	15.38	N	9.9
7.184000	43.92	---	60.00	16.08	N	9.9
7.184000	---	43.01	50.00	6.99	N	9.9
9.880000	42.52	---	60.00	17.48	N	10.0
9.880000	---	40.59	50.00	9.41	N	10.0
10.624000	43.99	---	60.00	16.01	N	10.1
10.624000	---	41.03	50.00	8.97	N	10.1
11.824000	---	39.76	50.00	10.24	N	10.1