

TEST REPORT

Report Number. : 15010475-E1V3

Applicant : BELKIN INTERNATIONAL, INC.
555 S. AVIATION BLVD., SUITE 180
EL SEGUNDO, CA 90245, USA

Model : WIZ023

FCC ID : K7SWIZ023

EUT Description : BoostCharge Pro 3-in-1 Magnetic Charging Stand

Test Standard(s) : FCC 47 CFR PART 15 SUBPART C

Date Of Issue:

2024-02-26

Prepared by:

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Revision History

Rev.	Issue Date	Revisions	Revised By
V1	2024-02-06	Initial Issue	---
V2	2024-02-21	Revised Section 5.1 and 5.4 to address TCB's questions	Tina Chu
V3	2024-02-26	Revised Sectio 5.2 to address TCB's question	Tina Chu

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1. ATTESTATION OF TEST RESULTS

COMPANY NAME: BELKIN INTERNATIONAL, INC.
555 S. AVIATION BLVD., SUITE 180
EL SEGUNDO, CA 90245, USA

EUT DESCRIPTION: BoostCharge Pro 3-in-1 Magnetic Charging Stand

MODEL NUMBER: WIZ023

BRAND: belkin

SERIAL NUMBER: Unit#2

SAMPLE RECEIPT DATE: 2023-12-20

DATE TESTED: 2024-01-10 to 2024-01-31

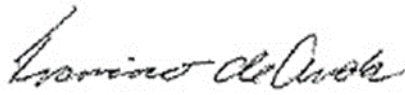
APPLICABLE STANDARDS	
STANDARD	TEST RESULTS
FCC PART 15 SUBPART C	Complies

UL Verification Services Inc. tested the above equipment in accordance with the requirements set forth in the above standards. The test results show that the equipment tested is capable of demonstrating compliance with the requirements as documented in this report.

The results documented in this report apply only to the tested sample, under the conditions and modes of operation as described herein. It is the manufacturer's responsibility to assure that additional production units of this model are manufactured with identical electrical and mechanical components. All samples tested were in good operating condition throughout the entire test program. Measurement Uncertainties are published for informational purposes only and were not taken into account unless noted otherwise.

This document may not be altered or revised in any way unless done so by UL Verification Services Inc. and all revisions are duly noted in the revisions section. Any alteration of this document not carried out by UL Verification Services Inc. will constitute fraud and shall nullify the document.

Approved & Released For
UL Verification Services Inc. By:



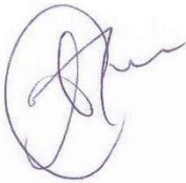
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2. TEST METHODOLOGY

This report contains data provided by the customer which can impact the validity of results. UL Verification Services Inc. is only responsible for the validity of results after the integration of the data provided by the customer.

The tests documented in this report were performed in accordance with:

ANSI C63.10-2013

FCC CFR 47 Part 2

FCC CFR 47 Part 15

KDB 414788 D01 Radiated Test Site

3. FACILITIES AND ACCREDITATION

UL Verification Services Inc. is accredited by A2LA, certification #0751.05, for all testing performed within the scope of this report. Testing was performed at the locations noted below.

	Address	ISED CABID	ISED Company Number	FCC Registration
☐	Building 1: 47173 Benicia Street, Fremont, CA 94538, USA	US0104	2324A	550739
☐	Building 2: 47266 Benicia Street, Fremont, CA 94538, USA			
☒	Building 4: 47658 Kato Rd, Fremont, CA 94538, USA			

4. DECISION RULES AND MEASUREMENT UNCERTAINTY

4.1. METROLOGICAL TRACEABILITY

All test and measuring equipment utilized to perform the tests documented in this report are calibrated on a regular basis, with a maximum time between calibrations of one year or the manufacturers' recommendation, whichever is less, and where applicable is traceable to recognized national standards.

4.2. DECISION RULES

The Decision Rule is based on Simple Acceptance in accordance with ISO Guide 98-4:2012 Clause 8.2. (Measurement uncertainty is not taken into account when stating conformity with a specified requirement.)

4.3. MEASUREMENT UNCERTAINTY

Where relevant, the following measurement uncertainty levels have been estimated for tests performed on the apparatus:

PARAMETER	U _{Lab}
Radio Frequency (Spectrum Analyzer)	141.16 Hz
Occupied Bandwidth	2.75%
Worst Case Conducted Disturbance, 9KHz to 0.15 MHz	3.78 dB
Worst Case Conducted Disturbance, 0.15 to 30 MHz	3.40 dB
Worst Case Radiated Disturbance, 9KHz to 30 MHz (E-field)	2.84 dB
Worst Case Radiated Disturbance, 9KHz to 30 MHz (H-field)	2.87 dB
Worst Case Radiated Disturbance, 30 to 1000 MHz	6.01 dB
Time Domain Measurements	3.39%
Temperature	0.57°C
Humidity	3.39%

Uncertainty figures are valid to a confidence level of 95%.

5. EQUIPMENT UNDER TEST

5.1. DESCRIPTION OF EUT

The EUT is a 3-in-1 wireless charging stand containing an adjustable angle Qi2 MPP/BPP 15W module, Qi BPP 5W pad, and an Apple Watch module. This wireless charger has three separate charging coils that can charge three client devices at the same time.

The first coil is used for charging a Qi2 compatible device at 360kHz (15W max), a Qi compatible device at 127.7kHz (7.5W max), and an AirPods case at 127.7kHz (1W max). The second coil is used to charge a Qi compatible device at 111kHz to 148kHz (5W Max). The third coil is used for charging an Apple Watch at 326.5kHz or 1.778MHz (5W Max).

The EUT is powered by a 36W USB-C AC/DC adapter. The wireless charging stand is hardwired on the EUT end and receives power through USB-C on the power supply end.

5.2. MAXIMUM E-FIELD STRENGTH

The transmitter has maximum peak radiated electric field strength as follows:

Fundamental Frequency (kHz)	E field (300m distance) FCC (dBuV/m)
Standby	Coil#1 127.7kHz: -8.24 Coil#2 111-148kHz: -11.61 Coil#3 326.5kHz: -22.13
360 (1 st coil, MagSafe iPhone 15W)	-34.06
127.7 (1 st coil, Legacy iPhone 7.5W)	-41.14
127.7 (1 st coil, AirPods Case 1W)	-7.06
111 to 148 (2 nd coil, Legacy iPhone, 5W Max)	2.94
111 to 148 (2 nd coil, AirPods Pro Case, 5W Max)	-11.3
326.5 (3 rd coil, Legacy Watch, 5W Max)	-27.2
Config 9 (see sec. 5.4)	Coil#1 360kHz: -23.36 Coil#2 111-148kHz: -5.72
Fundamental Frequency (kHz)	E field (30m distance) FCC (dBuV/m)
1778 (3 rd coil, New Watch, 5W Max)	7.38
Config 9 (see sec. 5.4)	Coil#3 1778kHz: -1.82

5.3. SOFTWARE AND FIRMWARE

The firmware version installed in the EUT during testing was:

Coil#1: 360kHz/127.7kHz: V0.26

Coil#2: 111kHz to 148kHz: V0.01

Coil#3: 326.5kHz /1.778MHz: V2.0.3

5.4. WORST-CASE CONFIGURATION

Testing for MagSafe iPhone15, watches and AirPods Pro case are based on direct contact with no shifts in position due to the embedded magnets around the wireless charging coils.

The legacy iPhone does not have an embedded magnet and is placed at the maximum power position during the testing.

For the entire radiated emissions test, the EUT was tested in desktop mode in the following configurations. The client devices were charging between 20% to 50% state of charge.

Radiated spurious emission 30MHz to 1GHz and AC conducted emissions were performed on Configuration 1, 9 at EUT minimum and maximum loads as worst-case.

The coil 1 charging pad can be rotated and investigations have been performed on tilt down and flatbed positions. The following configurations were tested:

Config	Descriptions	Frequency	Client and worst-case orientation
1	EUT stand alone, standby, powered by AC/DC adapter.	@127.7kHz @111kHz to 148kHz @326.5kHz 360kHz and 1.778MHz were not observed	None. Standby.
2	Direct contact during charging/operating between the EUT & WPT Client, EUT is powered by AC/DC adapter.	@360kHz	1 st coil: MagSafe iPhone15 . 0 degrees when the lighting connector facing down. Charging pad tilted down.
3		@127.7kHz	1 st coil: Legacy iPhone. 90 degrees when the lighting connector is 90 degrees away from stand to the left. Charging pad as center position.
4		@127.7kHz	1 st coil: AirPods Pro Case. 90 degrees when the lighting connector is 90 degrees. Charging pad as center position.
5		@111kHz to 148kHz	2 nd coil: Legacy iPhone. 180 degrees when the lighting connector is 90 degrees away from stand to the left.
6		@111kHz to 148kHz	2 nd coil: AirPods Pro Case. 0 degrees when the lighting connector is facing towards end user.
7		@326.5kHz	3 rd coil: Legacy Apple Watch. 0 degrees when the home button at 3 o'clock.
8		@1.778MHz	3 rd coil: New Apple Watch . 0 degrees when the home button at 3 o'clock.
9		@360kHz @111kHz to 148kHz @ 1.778MHz	1 st coil: MagSafe iPhone15. 0 degrees when the lighting connector facing down. Charging pad tilted down. 2 nd coil: Legacy iPhone. 180 degrees when the lighting connector is 90 degrees away from stand to the left. 3 rd coil: New Apple Watch. 0 degrees when the home button at 3 o'clock.

6. TEST AND MEASUREMENT EQUIPMENT

The following test and measurement equipment was utilized for the tests documented in this report:

RADIATED EMISSIONS TEST EQUIPMENT LIST					
Description	Manufacturer	Model	ID Num	Cal Due	Last Cal
Antenna, Passive Loop 30Hz - 1MHz	ELECTRO METRICS	EM-6871	170013	2024-07-31	2022-07-28
Antenna, Passive Loop 100KHz - 30MHz	ELECTRO METRICS	EM-6872	170015	2024-07-31	2022-07-28
Antenna, Broadband Hybrid, 30MHz to 3GHz	Sunol Sciences Corp.	JB3	232075	2024-03-31	2023-03-13
EMI TEST RECEIVER	Rohde & Schwarz	ESW44	225688	2024-02-29	2023-02-14
Amplifier, 9KHz to 1GHz, 32dB	SONOMA INSTRUMENT	310	175953	2024-03-31	2023-03-03
AC MAINS LINE CONDUCTED EMISSIONS TEST EQUIPMENT LIST					
Description	Manufacturer	Model	ID Num	Cal Due	Last Cal
LISN	Fischer Custom Communications, Inc`	FCC-LISN-50/250-25-2-01-480V	175765	2024-01-31	2023-01-27
EMI TEST RECEIVER	Rohde & Schwarz	ESR	171646	2024-02-29	2023-02-20
Transient Limiter	TE	TBFL1	207996	2024-08-31	2023-08-10
UL AUTOMATION SOFTWARE					
Radiated Software	UL	UL EMC	Rev 9.5 2023-05-01		
AC Line Conducted Software	UL	UL EMC	Rev 9.5 2023-03-03		

7. OCCUPIED BANDWIDTH

TEST PROCEDURE

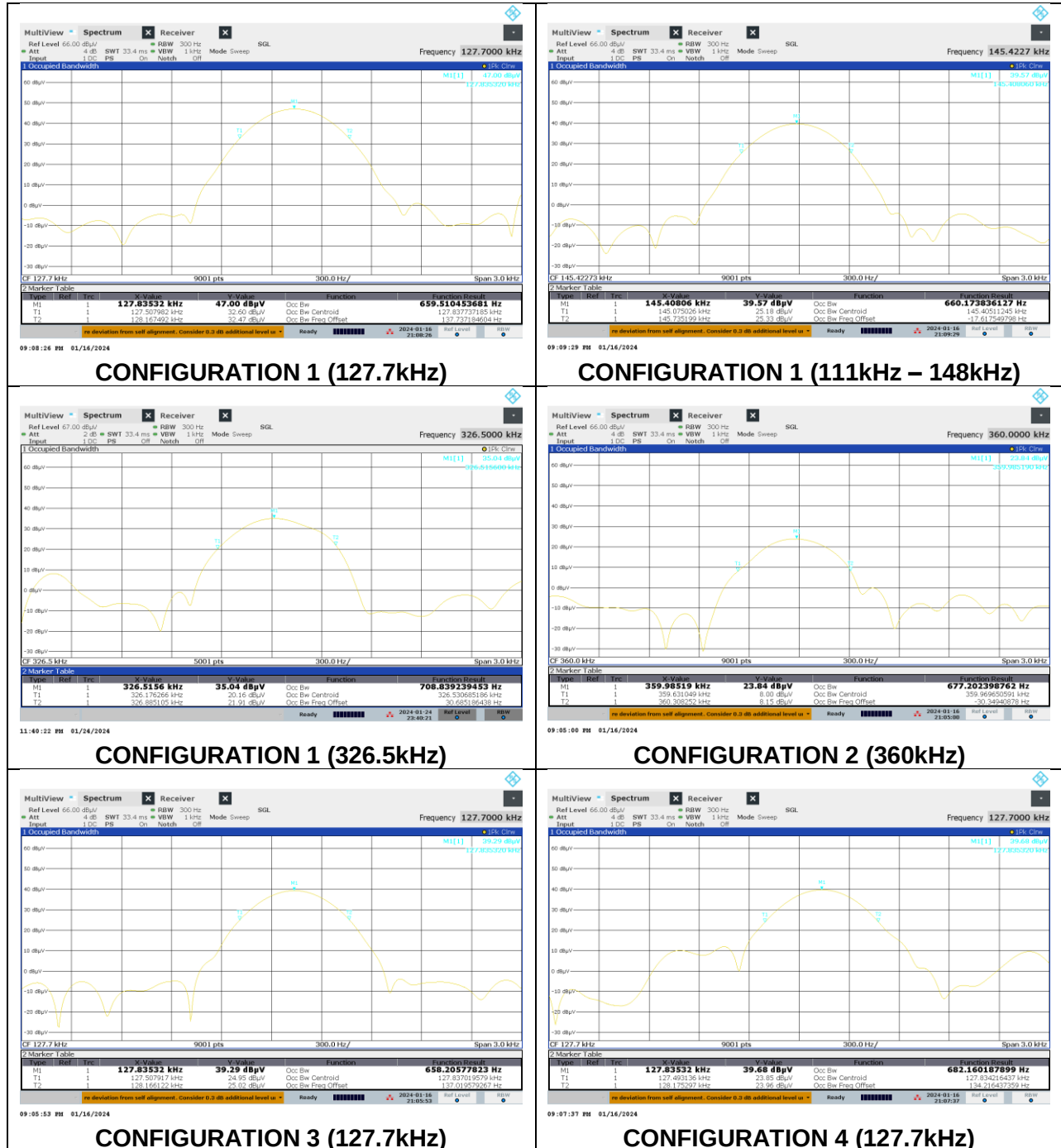
The transmitter output is connected to the spectrum analyzer. The RBW is set to 300Hz. The VBW is set to 3 times the RBW. The sweep time is coupled. The spectrum analyzer internal 99% bandwidth function is utilized.

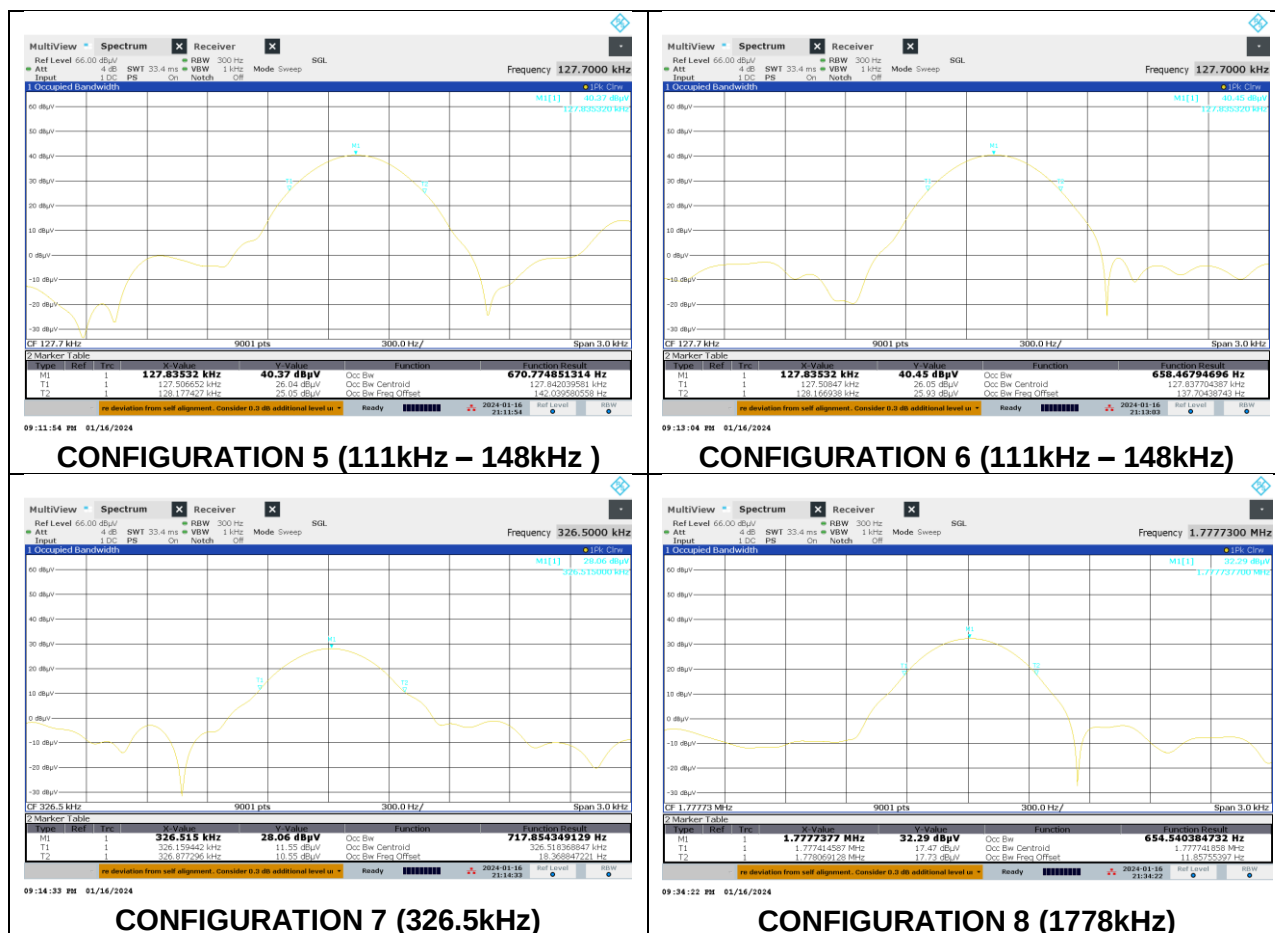
Note: Because the measured signal is CW-like, adjusting the RBW per C63.10 would not be practical since measured bandwidth will always follow the RBW and the result will be approximately twice the RBW.

RESULTS

Test Engineer:	23522 SI
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Configuration	Frequency (kHz)	99% Bandwidth (Hz)
1	127.7	659.51
1	111-148	660.17
1	326.5	708.84
2	360	677.20
3	127.7	658.21
4	127.7	682.16
5	111-148	670.77
6	111-148	658.47
7	326.5	717.85
8	1778	654.54





8. RADIATED EMISSION TEST RESULTS

8.1. LIMITS AND PROCEDURE

LIMIT

FCC §15.209 (a)

Frequency (MHz)	Field Strength (microvolts/meter)	Measurement Distance (m)
0.009–0.490	2400/F(kHz)	300
0.490–1.705	24000/F(kHz)	30
1.705–30.0	30	30
30–88	100	3
88 to 216	150	3
216 to 960	200	3
Above 960 MHz	500	3

Note: The lower limit shall apply at the transition frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 80 cm above the ground plane for measurement below 1GHz; The antenna to EUT distance is 3 meters. The EUT is configured in accordance with ANSI C63.10. The EUT is set to transmit in a continuous mode.

For measurements below 1 GHz the resolution bandwidth is set to 100 kHz for peak detection measurements or 120 kHz for quasi-peak detection measurements. Peak detection is used unless otherwise noted as quasi-peak.

The frequency range of interest is monitored at a fixed antenna height and EUT azimuth. The EUT is rotated through 360 degrees to maximize emissions received. The antenna is scanned from 1 to 4 meters above the ground plane to further maximize the emission. Measurements are made with the antenna polarized in both the vertical and the horizontal positions.

For below 30MHz testing, investigation was done on three antenna orientations (parallel, perpendicular, and ground-parallel), parallel and perpendicular are the worst orientations, therefore testing was performed on these two orientations only. Blue color trace on plots: Parallel orientation. Green color trace on plots: Perpendicular orientation.

KDB 414788 Open Field Site(OFS) and Chamber Correlation Justification

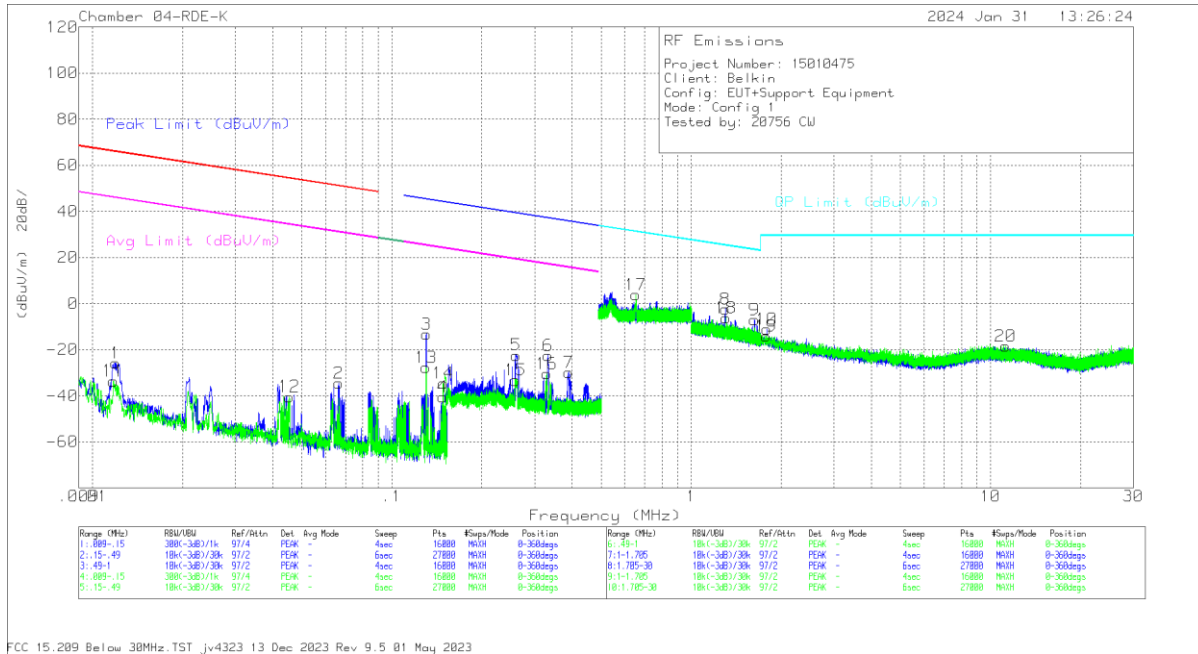
Base on FCC 15.31 (f) (2): measurements may be performed at a distance closer than that specified in the regulations; however, an attempt should be made to avoid making measurements in the near field.

OFS and chamber correlation testing had been performed and chamber measured test result is the worst case test result.

RESULTS

8.2. FCC TX FUNDAMENTAL AND SPURIOUS EMISSIONS FROM 9 kHz TO 30 MHz

8.2.1. CONFIGURATION 1: WPT ON STANDBY



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF) (dBm)	Amp/Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
11	.0118	17.35	Pk	60.2	-31.1	-80	-33.55	66.18	-99.73	46.18	-79.73	-	-	-	-	0-360
1	.012	25.15	Pk	60.1	-31.1	-80	-25.85	66.02	-91.87	46.02	-71.87	-	-	-	-	0-360
12	.0455	14.64	Pk	57.2	-32.2	-80	-40.36	54.43	-94.79	34.43	-74.79	-	-	-	-	0-360
2	.0664	21.58	Pk	56.1	-32.2	-80	-34.52	51.14	-85.66	31.14	-65.66	-	-	-	-	0-360
13	.1278	34.63	Pk	55.8	-32.3	-80	-21.87	-	-	-	-	45.49	-67.36	25.49	-47.36	92
3	.1278	48.26	Pk	55.8	-32.3	-80	-8.24	-	-	-	-	45.49	-53.73	25.49	-33.73	355
4	.1455	44.69	Pk	55.9	-32.2	-80	-11.61	-	-	-	-	44.37	-55.89	24.37	-35.89	245
14	.1455	27.37	Pk	55.9	-32.2	-80	-28.93	-	-	-	-	44.37	-73.3	24.37	-53.3	355
15	.2589	22.73	Pk	56.2	-32.2	-80	-33.27	-	-	-	-	39.35	-72.62	19.35	-52.62	0-360
5	.26	33.51	Pk	56.2	-32.1	-80	-22.39	-	-	-	-	39.31	-40.7	19.31	-41.7	0-360
16	.3263	26.4	Pk	56.2	-32.1	-80	-29.5	-	-	-	-	37.34	-66.84	17.34	-46.84	252
6	.3263	33.77	Pk	56.2	-32.1	-80	-22.13	-	-	-	-	37.34	-59.47	17.34	-39.47	165
7	.3901	26.13	Pk	56.2	-32.1	-80	-29.77	-	-	-	-	35.78	-65.55	15.78	-45.55	0-360

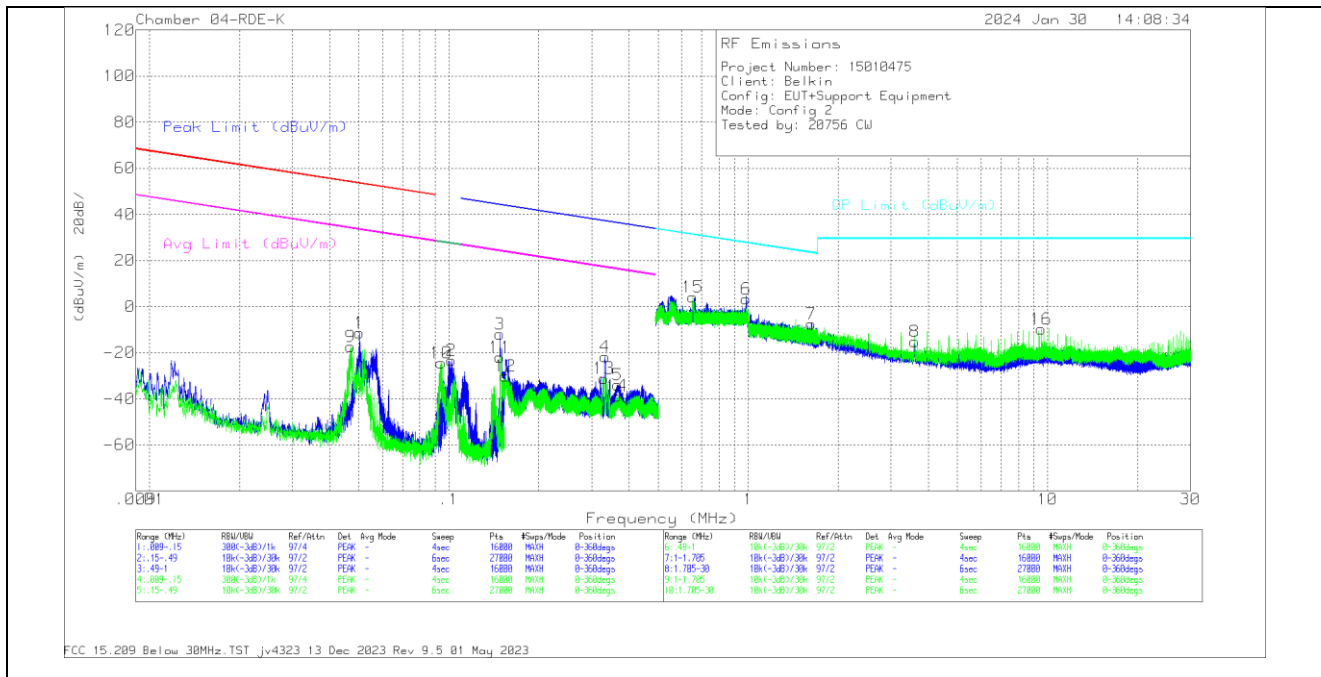
Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF) (dB/m)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
17	.6538	19.57	Pk	56.4	-32.2	-40	3.77	31.3	-27.53	0-360
8	1.3024	24.67	Pk	45.1	-32.1	-40	-2.33	25.33	-27.66	0-360
18	1.3084	20.74	Pk	45.1	-32	-40	-6.16	25.29	-31.45	0-360
9	1.6279	21.68	Pk	43.4	-32	-40	-6.92	23.4	-30.32	0-360
19	1.7794	15.22	Pk	42.6	-31.9	-40	-14.08	29.5	-43.58	0-360
10	1.7909	18.14	Pk	42.6	-31.9	-40	-11.16	29.5	-40.66	0-360
20	11.2282	18.65	Pk	34.7	-31.7	-40	-18.35	29.5	-47.85	0-360

Pk - Peak detector

Pk - Peak detector

8.2.2. CONFIGURATION 2: OPERATING MODE WITH iPhone (360kHz)



DATA

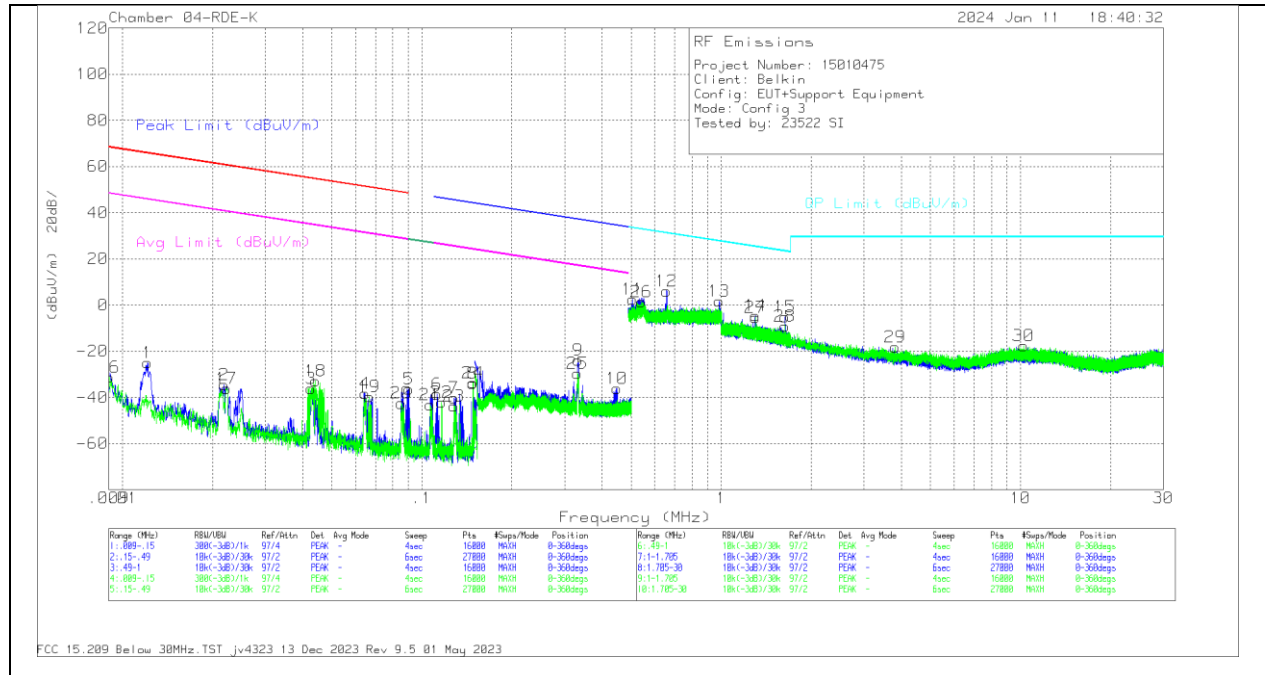
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF) (dBm)	Amp/Cbl (dB)	Dist Corr 30m (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	QP Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
9	.0471	37.64	Pk	57.2	-32.2	-80	-17.36	54.13	-71.49	34.13	-51.49	-	-	-	-	-	-	0-360
1	.0503	43.61	Pk	57.1	-32.1	-80	-11.39	53.55	-64.94	33.55	-44.94	-	-	-	-	-	-	0-360
10	.0943	32.21	Pk	55.7	-32.3	-80	-24.39	-	-	-	-	28.1	-52.49	-	-	-	-	0-360
2	.1022	33.16	Pk	55.6	-32.2	-80	-23.44	-	-	-	-	27.42	-50.86	-	-	-	-	0-360
3	.1483	44.33	Pk	55.9	-32.2	-80	-11.97	-	-	-	-	-	-	44.2	-56.17	24.2	-36.17	0-360
11	.1483	34.3	Pk	55.9	-32.2	-80	-22	-	-	-	-	-	-	44.2	-66.2	24.2	-46.2	0-360
12	.1545	26.06	Pk	56	-32.3	-80	-30.24	-	-	-	-	-	-	43.84	-74.08	23.84	-54.08	0-360
13	.3294	24.79	Pk	56.2	-32.1	-80	-31.11	-	-	-	-	-	-	37.26	-68.37	17.26	-48.37	0-360
4	.3324	34.12	Pk	56.2	-32.1	-80	-21.78	-	-	-	-	-	-	37.18	-58.96	17.18	-38.96	0-360
14	.3601	20.18	Pk	56.2	-32.2	-80	-35.82	-	-	-	-	-	-	36.48	-72.3	16.48	-52.3	10
5	.3586	21.94	Pk	56.2	-32.2	-80	-34.06	-	-	-	-	-	-	36.52	-70.58	16.52	-50.58	289

Pk - Peak detector

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF) (dB/m)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
15	.6532	19.94	Pk	56.4	-32.2	-40	4.14	31.31	-27.17	0-360
6	.9852	18.73	Pk	56.6	-32.1	-40	3.23	27.75	-24.52	0-360
7	1.6243	20.93	Pk	43.5	-32	-40	-7.57	23.42	-30.99	0-360
8	3.5904	18.97	Pk	37.8	-31.9	-40	-15.13	29.5	-44.63	0-360
16	9.5241	27.33	Pk	34.7	-31.7	-40	-9.67	29.5	-39.17	0-360

Pk - Peak detector

8.2.3. CONFIGURATION 3: OPERATING MODE WITH iPhone (127.7kHz)



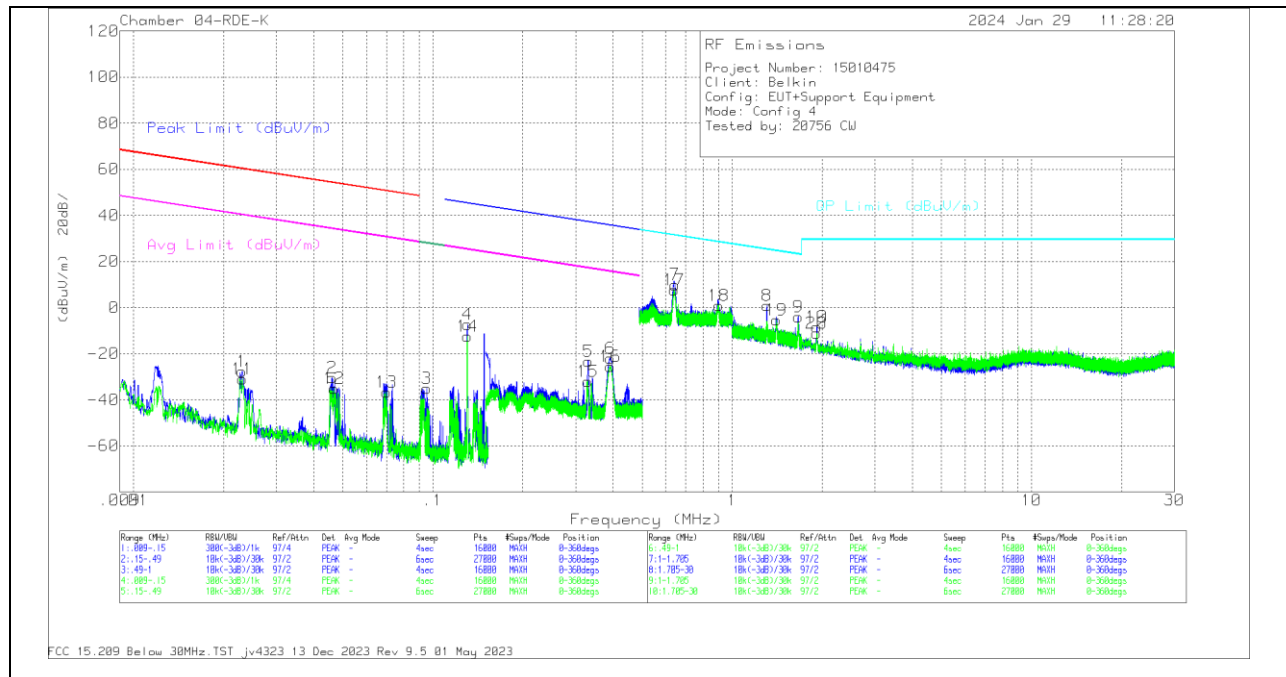
DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF)	Amp/Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (Degs)
16	.009	18.51	Pk	61.3	-31.1	-80	-31.29	68.48	-99.77	48.48	-79.77	-	-	0-360	90
1	.0121	26.08	Pk	60.1	-31.1	-80	-24.92	65.9	-90.82	45.9	-70.82	-	-	0-360	0
2	.0218	18.21	Pk	58.9	-31.7	-80	-34.59	60.8	-95.39	40.8	-75.39	-	-	0-360	0
17	.0222	16.89	Pk	58.9	-31.8	-80	-36.01	60.65	-96.66	40.65	-76.66	-	-	0-360	90
3	.0426	18.86	Pk	57.3	-32.3	-80	-36.14	55	-91.14	35	-71.14	-	-	0-360	0
18	.0442	22.08	Pk	57.3	-32.3	-80	-32.92	54.68	-87.6	34.68	-67.6	-	-	0-360	90
4	.0646	17.79	Pk	56.2	-32.2	-80	-38.21	51.38	-89.59	31.38	-69.59	-	-	0-360	0
19	.0668	16.35	Pk	56.1	-32.2	-80	-39.75	51.09	-90.84	31.09	-70.84	-	-	0-360	90
20	.0855	13.98	Pk	55.9	-32.4	-80	-42.52	48.94	-91.46	28.94	-71.46	-	-	0-360	90
5	.0903	19.97	Pk	55.9	-32.4	-80	-36.53	-	-	-	-	28.47	-65	0-360	0
21	.1067	13.29	Pk	55.8	-32.2	-80	-43.11	-	-	-	-	27.06	-70.17	0-360	90
6	.1126	17.78	Pk	55.8	-32.2	-80	-38.62	46.6	-85.22	26.6	-65.22	-	-	0-360	0
22	.1165	14.18	Pk	55.8	-32.2	-80	-42.22	46.3	-88.52	26.3	-68.52	-	-	0-360	90
23	.128	12.59	Pk	55.9	-32.3	-80	-43.81	45.48	-89.29	25.48	-69.29	-	-	233	90
7	.1279	15.26	Pk	55.9	-32.3	-80	-41.14	45.49	-86.63	25.49	-66.63	-	-	177	0
8	.1479	22.17	Pk	56	-32.2	-80	-34.03	44.22	-78.25	24.22	-58.25	-	-	0-360	0
24	.1484	22.63	Pk	56	-32.2	-80	-33.57	44.2	-77.77	24.2	-57.77	-	-	0-360	90
25	.3313	26.15	Pk	56.3	-32.1	-80	-29.65	37.21	-66.86	17.21	-46.86	-	-	0-360	90
9	.332	31.93	Pk	56.3	-32.1	-80	-23.87	37.19	-61.06	17.19	-41.06	-	-	0-360	0
10	.4494	20.07	Pk	56.2	-32.3	-80	-36.03	34.55	-70.58	14.55	-50.58	-	-	0-360	0

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (Degs)
11	.5066	18.43	Pk	56.2	-32.1	-40	2.53	33.51	-30.98	0-360	0
26	.54	17.32	Pk	56.3	-32.2	-40	1.42	32.96	-31.54	0-360	90
12	.6567	21.84	Pk	56.3	-32.2	-40	5.94	31.26	-25.32	0-360	0
13	.9848	17.39	Pk	56.4	-32.1	-40	1.69	27.75	-26.06	0-360	0
14	1.2996	22.25	Pk	45.2	-32.1	-40	-4.65	25.35	-30	0-360	0
27	1.3003	21.6	Pk	45.2	-32.1	-40	-5.3	25.35	-30.65	0-360	90
28	1.6322	19.3	Pk	43.5	-32	-40	-9.2	23.38	-32.58	0-360	90
15	1.6334	23.33	Pk	43.5	-32	-40	-5.17	23.37	-28.54	0-360	0
29	3.8094	16.23	Pk	37.5	-31.9	-40	-18.17	29.5	-47.67	0-360	90
30	10.2158	19.29	Pk	34.8	-31.7	-40	-17.61	29.5	-47.11	0-360	90

Pk - Peak detector

8.2.4. CONFIGURATION 4: OPERATING MODE WITH AirPods Pro Case (127.7kHz)



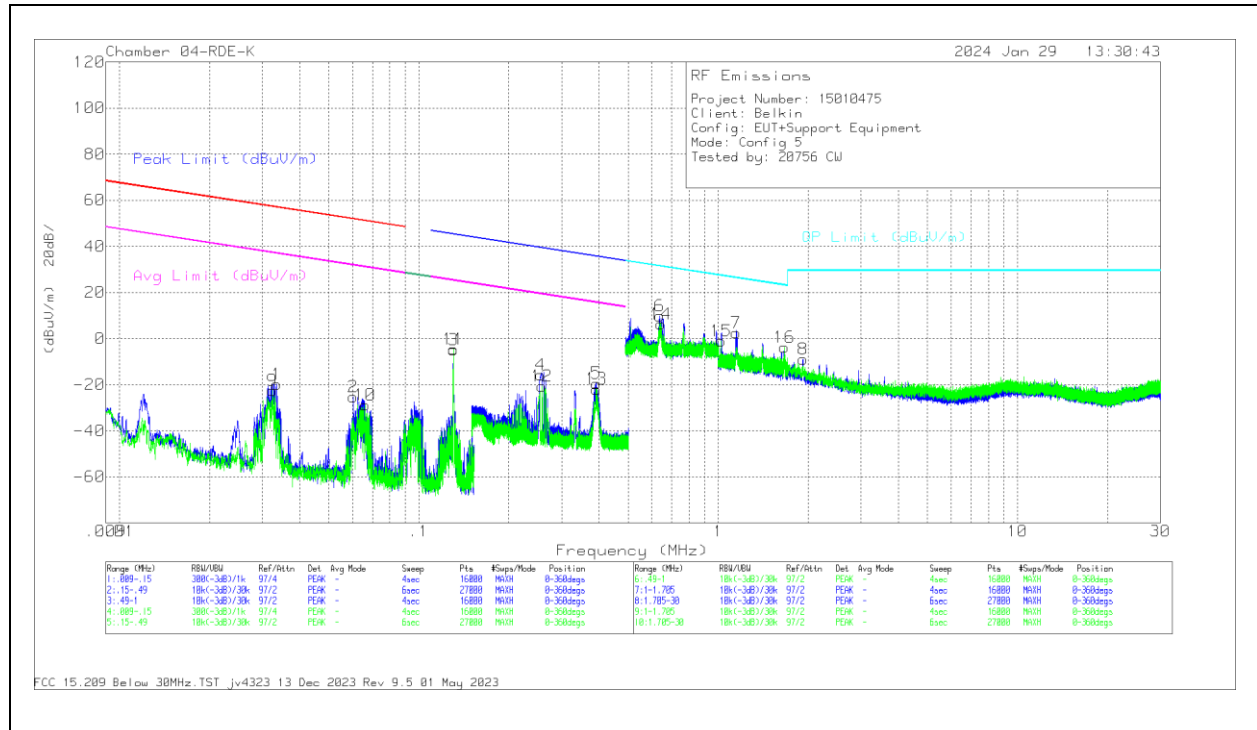
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Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF) (dBm)	Amp/Cbl (dB)	Dist Corr 30m (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	QP Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.0231	25.32	Pk	58.8	-31.8	-80	-27.68	60.32	-88	40.32	-69	-	-	-	-	-	-	0-360
11	.0231	22.04	Pk	58.8	-31.8	-80	-30.96	60.31	-91.27	40.31	-71.27	-	-	-	-	-	-	0-360
2	.0461	24.68	Pk	57.2	-32.2	-80	-30.32	54.32	-64.64	34.32	-64.64	-	-	-	-	-	-	0-360
12	.0461	19.88	Pk	57.2	-32.2	-80	-35.12	54.2	-89.32	34.2	-69.32	-	-	-	-	-	-	0-360
13	.07	19.54	Pk	56	-32.2	-80	-36.66	50.68	-87.34	30.68	-67.34	-	-	-	-	-	-	0-360
3	.0953	21.59	Pk	55.7	-32.3	-80	-35.01	-	-	-	-	28.02	-63.03	-	-	-	-	0-360
4	.1278	49.44	Pk	55.8	-32.3	-80	-7.06	-	-	-	-	45.49	-52.55	25.49	-32.55	25.49	-32.55	335
14	.1278	44.36	Pk	55.8	-32.3	-80	-12.14	-	-	-	-	45.49	-57.63	25.49	-37.63	25.49	-37.63	246
15	.3294	23.95	Pk	56.2	-32.1	-80	-31.95	-	-	-	-	37.26	-69.21	17.26	-49.21	17.26	-49.21	0-360
5	.331	32.56	Pk	56.2	-32.1	-80	-23.34	-	-	-	-	37.21	-60.55	17.21	-40.55	17.21	-40.55	0-360
6	.3916	34	Pk	56.2	-32.1	-80	-21.9	-	-	-	-	35.75	-57.65	15.75	-37.65	15.75	-37.65	0-360
16	.3916	30.29	Pk	56.2	-32.1	-80	-25.61	-	-	-	-	35.75	-61.36	15.75	-41.36	15.75	-41.36	0-360

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF) (dBm)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
17	.6408	23.57	Pk	56.3	-32.2	-40	7.67	31.48	-23.81	0-360
7	.6433	25.89	Pk	56.3	-32.2	-40	9.99	31.44	-21.45	0-360
18	.9021	16.37	Pk	56.5	-32.1	-40	.77	28.51	-27.74	0-360
8	1.3069	27.86	Pk	45.1	-32.1	-40	.86	25.3	-24.44	0-360
19	1.4048	22.02	Pk	44.6	-32.1	-40	-5.48	24.68	-30.16	0-360
9	1.6621	24.85	Pk	43.3	-32.1	-40	-3.95	23.22	-27.17	0-360
20	1.9167	19.08	Pk	41.9	-32	-40	-11.02	29.5	-40.52	0-360
10	1.9177	21.84	Pk	41.9	-32	-40	-8.26	29.5	-37.76	0-360

Pk - Peak detector

8.2.5. CONFIGURATION 5: OPERATING MODE WITH iPhone (111-148kHz)



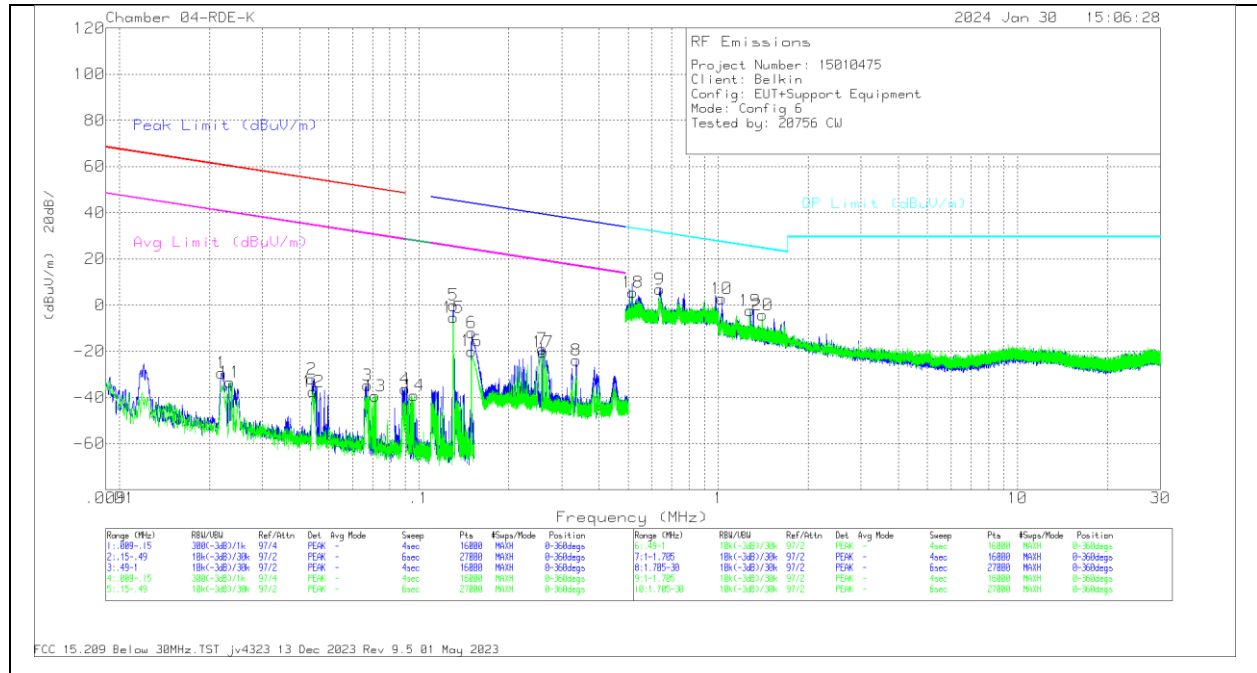
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Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF) (dBm)	Amp/Cbl (dB)	Dist Corr 300m (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
9	.0325	31.73	Pk	57.8	-32.1	-80	-22.57	57.36	-79.93	37.36	-59.93	-	-	-	-	0-360
1	.0336	34.51	Pk	57.8	-32.1	-80	-19.79	57.07	-76.86	37.07	-56.86	-	-	-	-	0-360
2	.0604	30.65	Pk	56.2	-32.2	-80	-25.35	51.96	-77.31	31.96	-57.31	-	-	-	-	0-360
10	.0663	27.23	Pk	56.1	-32.2	-80	-28.87	51.16	-80.03	31.16	-60.03	-	-	-	-	0-360
3	.1278	59.44	Pk	55.8	-32.3	-80	2.94	-	-	-	-	45.49	-42.55	25.49	-22.55	356
11	.1278	55.37	Pk	55.8	-32.3	-80	-1.13	-	-	-	-	45.5	-46.63	25.5	-26.63	237
4	.2554	40.29	Pk	56.2	-32.2	-80	-15.71	-	-	-	-	39.47	-55.18	19.47	-35.18	0-360
12	.2581	35.32	Pk	56.2	-32.2	-80	-20.68	-	-	-	-	39.38	-60.06	19.38	-40.06	0-360
13	.3913	34.05	Pk	56.2	-32.1	-80	-21.85	-	-	-	-	35.76	-57.61	15.76	-37.61	0-360
5	.3918	36.5	Pk	56.2	-32.1	-80	-19.4	-	-	-	-	35.75	-55.15	15.75	-35.15	0-360

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
6	.6378	25.73	Pk	56.3	-32.2	-40	9.83	31.52	-21.69	0-360
14	.6438	22.15	Pk	56.3	-32.2	-40	6.25	31.44	-25.19	0-360
15	1.0206	24.38	Pk	46.6	-32.1	-40	-1.12	27.45	-28.57	0-360
7	1.1474	28.66	Pk	45.9	-32.1	-40	2.46	26.43	-23.97	0-360
16	1.6605	25.04	Pk	43.3	-32.1	-40	-3.76	23.23	-26.99	0-360
8	1.9198	21.29	Pk	41.9	-32	-40	-8.81	29.5	-38.31	0-360

Pk - Peak detector

8.2.6. CONFIGURATION 6: OPERATING MODE WITH AirPods Pro Case (111-148kHz)



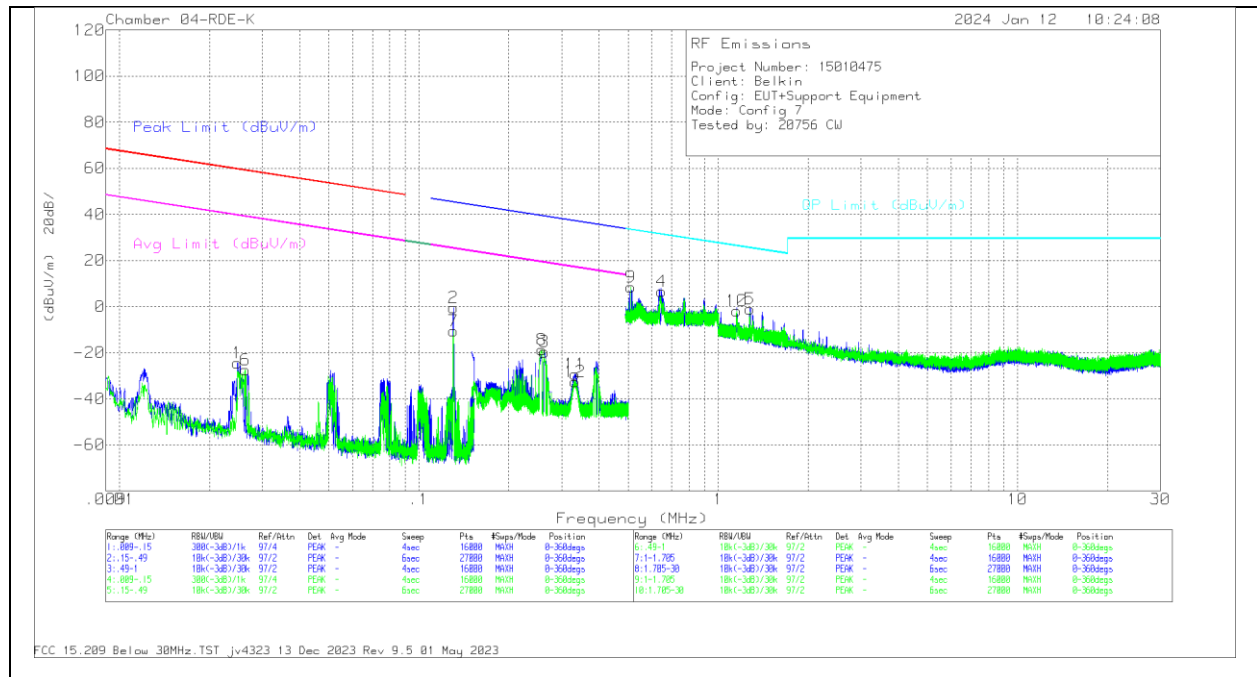
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Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF) (dB/m)	Amp/Cbl (dB)	Dist Corr 30m (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	QP Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.0219	23.34	Pk	58.9	-31.7	-80	-29.46	60.77	-90.23	40.77	-70.23	-	-	-	-	-	-	0-360
11	.0234	19.63	Pk	58.7	-31.8	-80	-33.47	60.2	-93.67	40.2	-73.67	-	-	-	-	-	-	0-360
2	.0439	22.95	Pk	57.2	-32.3	-80	-32.15	54.73	-86.88	34.73	-66.88	-	-	-	-	-	-	0-360
12	.0445	17.58	Pk	57.2	-32.3	-80	-37.52	54.63	-92.15	34.63	-72.15	-	-	-	-	-	-	0-360
3	.0674	21.41	Pk	56.1	-32.2	-80	-34.69	51.01	-85.7	31.01	-65.7	-	-	-	-	-	-	0-360
13	.0714	16.77	Pk	56	-32.2	-80	-39.43	50.51	-89.94	30.51	-69.94	-	-	-	-	-	-	0-360
4	.09	20.3	Pk	55.8	-32.4	-80	-36.3	48.5	-84.8	28.5	-64.8	-	-	-	-	-	-	0-360
14	.0964	17.55	Pk	55.7	-32.3	-80	-39.05	-	-	-	-	27.92	-66.97	-	-	-	-	0-360
5	.1304	56.33	Pk	55.8	-32.2	-80	-0.7	-	-	-	-	-	-	45.32	-45.39	25.32	-25.39	0-360
15	.1304	51.06	Pk	55.8	-32.2	-80	-5.34	-	-	-	-	-	-	45.32	-50.66	25.32	-30.66	0-360
6	.147	45	Pk	55.9	-32.2	-80	-11.3	-	-	-	-	-	-	44.27	-55.57	24.27	-35.57	176
16	.147	36.65	Pk	55.9	-32.2	-80	-19.65	-	-	-	-	-	-	44.27	-63.92	24.27	-43.92	80
7	.2592	37.11	Pk	56.2	-32.2	-80	-18.89	-	-	-	-	-	-	39.34	-58.23	19.34	-38.23	0-360
17	.2597	35.57	Pk	56.2	-32.2	-80	-20.43	-	-	-	-	-	-	39.33	-59.76	19.33	-39.76	0-360
8	.3352	32.22	Pk	56.2	-32.2	-80	-23.78	-	-	-	-	-	-	37.1	-60.88	17.1	-40.88	0-360

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF) (dB/m)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
18	.5179	21.4	Pk	56.2	-32.2	-40	5.4	33.32	-27.92	0-360
9	.6378	22.82	Pk	56.3	-32.2	-40	6.92	31.52	-24.6	0-360
10	1.0272	28.39	Pk	46.6	-32.1	-40	2.89	27.39	-24.5	0-360
19	1.2757	24.47	Pk	45.3	-32.1	-40	-2.33	25.51	-27.84	0-360
20	1.4052	23.23	Pk	44.6	-32.1	-40	-4.27	24.67	-28.94	0-360

Pk - Peak detector

8.2.7. CONFIGURATION 7: OPERATING MODE WITH Watch (326.5kHz)



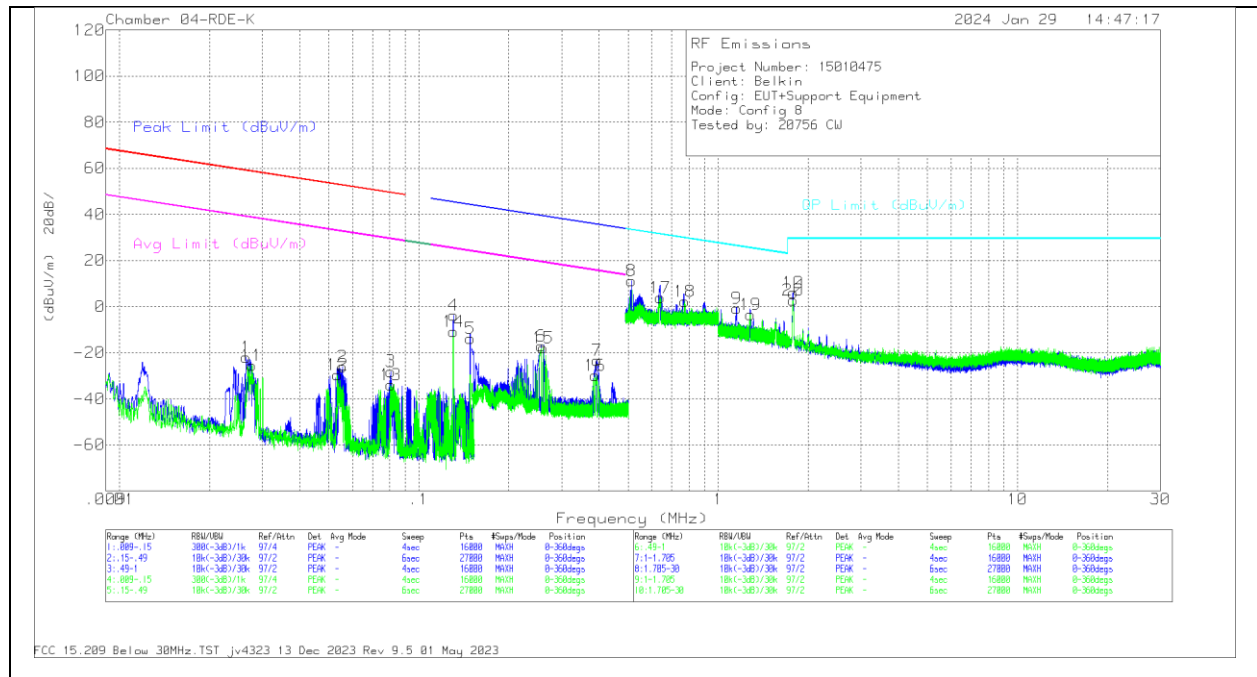
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Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF)	Amp/Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (Degs)
1	.0248	28.79	Pk	58.6	-31.8	-80	-24.41	59.69	-84.1	39.69	-64.1	0-360	0
6	.0263	26.11	Pk	58.4	-31.9	-80	-27.39	59.19	-86.58	39.19	-66.58	0-360	90
2	.1304	55.75	Pk	55.9	-32.2	-80	-5.55	45.32	-45.87	25.32	-25.87	0-360	0
7	.1304	45.83	Pk	55.9	-32.2	-80	-10.47	45.32	-55.79	25.32	-35.79	0-360	90
8	.2573	37.15	Pk	56.3	-32.2	-80	-18.75	39.41	-58.16	19.41	-38.16	0-360	90
3	.2626	36.14	Pk	56.3	-32.1	-80	-19.66	39.23	-58.89	19.23	-38.89	0-360	0
11	.3264	28.6	Pk	56.3	-32.1	-80	-27.2	37.34	-64.54	17.34	-44.54	358	90
12	.3274	26.63	Pk	56.3	-32.1	-80	-29.17	37.31	-66.48	17.31	-46.48	2	90

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (Degs)
9	.511	24.44	Pk	56.2	-32.2	-40	8.44	33.44	-25	0-360	90
4	.6466	22.54	Pk	56.3	-32.2	-40	6.64	31.4	-24.76	0-360	0
10	1.1517	24.23	Pk	46	-32.1	-40	-1.87	26.4	-28.27	0-360	90
5	1.2767	25.6	Pk	45.4	-32.1	-40	-1.1	25.51	-26.61	0-360	0

Pk - Peak detector

8.2.8. CONFIGURATION 8: OPERATING MODE WITH Watch (1.778MHz)



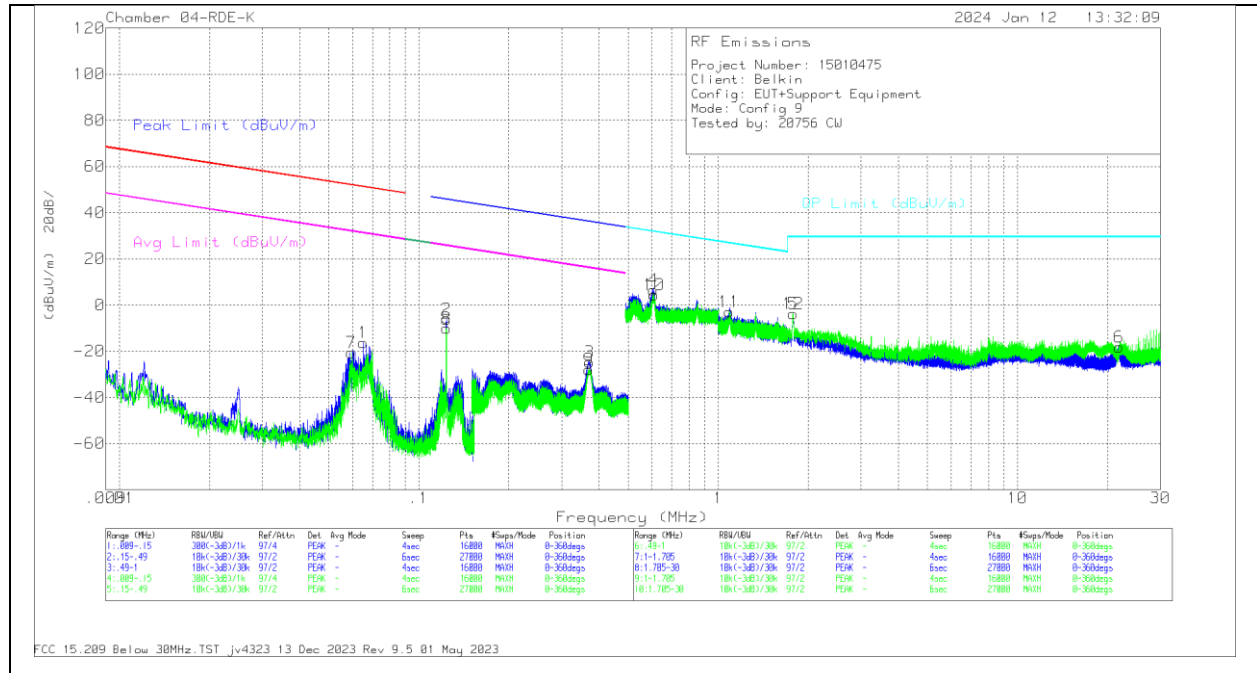
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Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF) (dBm)	Amp/Cbl (dB)	Dist Corr 30m (dB)	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
1	.0265	31.54	Pk	58.4	-31.9	-80	-21.96	59.12	-81.08	39.12	-61.08	-	-	-	-	0-360
11	.0277	28.1	Pk	58.3	-31.9	-80	-25.5	58.74	-84.24	38.74	-64.24	-	-	-	-	0-360
12	.0534	25.79	Pk	56.8	-32.2	-80	-29.61	53.03	-82.64	33.03	-62.64	-	-	-	-	0-360
2	.0555	29.57	Pk	56.6	-32.2	-80	-26.03	52.7	-79.73	32.7	-58.73	-	-	-	-	0-360
13	.0805	22.84	Pk	55.7	-32.4	-80	-33.86	49.47	-83.33	29.47	-63.33	-	-	-	-	0-360
3	.0808	28.59	Pk	55.7	-32.4	-80	-28.11	49.44	-77.55	29.44	-57.55	-	-	-	-	0-360
4	.1304	52.61	Pk	55.8	-32.2	-80	-3.79	-	-	-	-	45.32	-49.11	25.32	-29.11	0-360
14	.1304	45.57	Pk	55.8	-32.2	-80	-10.83	-	-	-	-	45.32	-56.15	25.32	-36.15	0-360
5	.1485	42.57	Pk	55.9	-32.2	-80	-13.73	-	-	-	-	44.19	-57.92	24.19	-37.92	0-360
6	.2564	38.99	Pk	56.2	-32.2	-80	-17.01	-	-	-	-	39.44	-56.45	19.44	-36.45	0-360
15	.2605	37.9	Pk	56.2	-32.1	-80	-18	-	-	-	-	39.3	-57.3	19.3	-37.3	0-360
16	.3883	25.97	Pk	56.2	-32.1	-80	-29.93	-	-	-	-	35.83	-65.76	15.83	-45.76	0-360
7	.3932	32.68	Pk	56.2	-32.1	-80	-23.22	-	-	-	-	35.72	-58.94	15.72	-38.94	0-360

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF) (dBm)	Amp/Cbl (dB)	Dist Corr 30m 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)
8	.5122	27.21	Pk	56.2	-32.2	-40	11.21	33.42	-22.21	0-360
17	.6407	19.85	Pk	56.3	-32.2	-40	3.95	31.48	-27.53	0-360
18	.7719	18.03	Pk	56.5	-32.2	-40	2.33	29.86	-27.53	0-360
9	1.151	25.38	Pk	45.9	-32.1	-40	-82	26.4	-27.22	0-360
19	1.2799	23.41	Pk	45.2	-32.1	-40	-3.49	25.48	-28.97	0-360
10	1.778	36.68	Pk	42.7	-32	-40	7.38	29.5	-22.12	333
20	1.778	33.06	Pk	42.7	-32	-40	3.76	29.5	-25.74	60

Pk - Peak detector

8.2.9. CONFIGURATION 9: OPERATING MODE WITH iPhone (360kHz) + iPhone (127.7kHz) + Watch (1.778MHz)



DATA

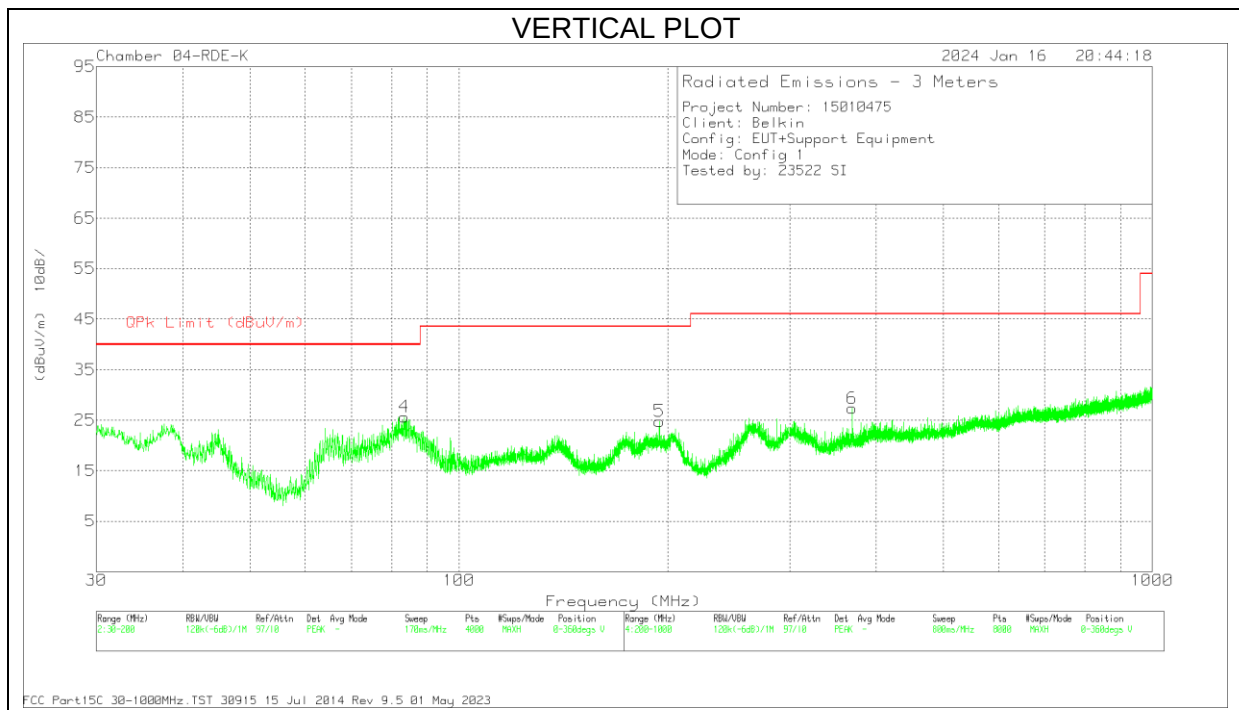
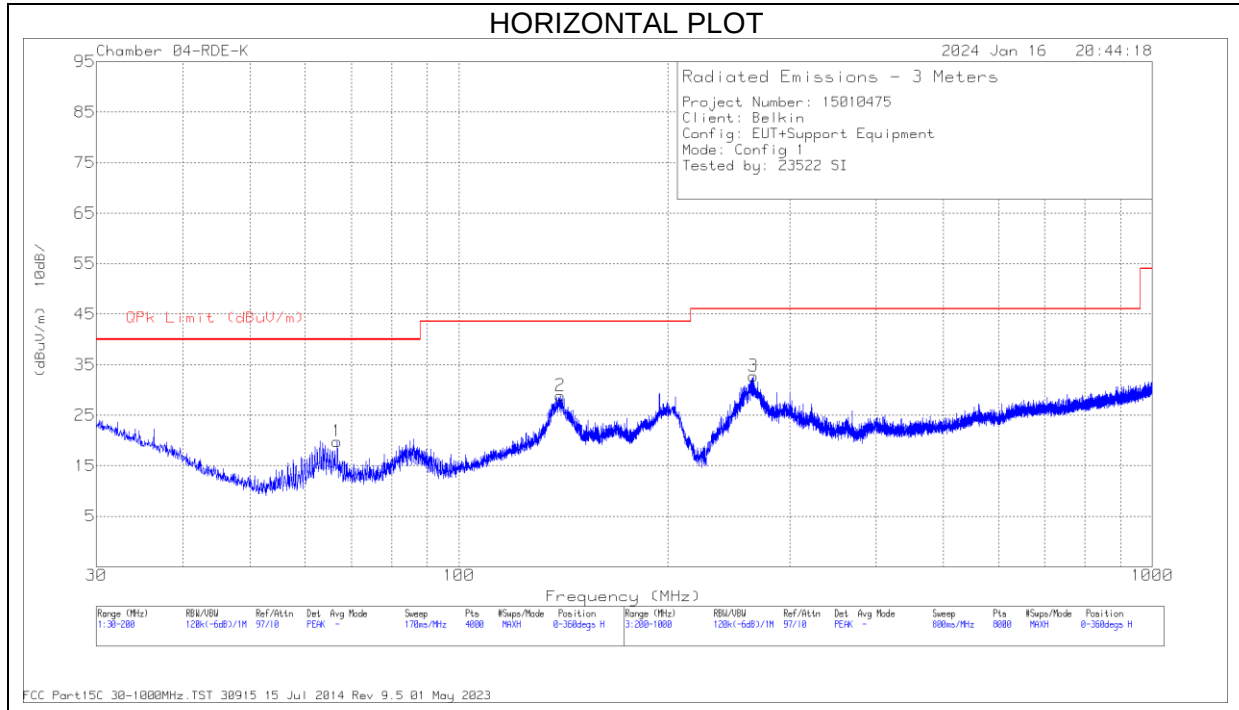
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF)(dB/m)	Amp/Cbl (dB)	Dist Corr 300m	Corrected Reading (dBuV/m)	Peak Limit (dBuV/m)	Margin (dB)	Avg Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (Degs)
7	.0595	35.22	Pk	56.3	-32.2	-80	-20.68	52.1	-72.78	32.1	-52.78	0-360	90
1	.0652	39.62	Pk	56.2	-32.2	-80	-16.38	51.3	-67.68	31.3	-47.68	0-360	0
2	.121	50.68	Pk	55.9	-32.3	-80	-5.72	45.97	-51.69	25.97	-31.69	344	0
8	.1211	46.91	Pk	55.9	-32.3	-80	-9.49	45.96	-55.45	25.96	-35.45	78	90
9	.3626	32.54	Pk	56.3	-32.2	-80	-23.36	36.42	-59.78	16.42	-39.78	350	0
3	.3628	28.82	Pk	56.3	-32.2	-80	-27.08	36.42	-63.5	16.42	-43.5	70	90

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	Loop Antenna E(ACF)	Amp/Cbl (dB)	Dist Corr 30m (dB) 40Log	Corrected Reading (dBuV/m)	QP Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Polarity (Degs)
4	.6067	22.53	Pk	56.3	-32.2	-40	6.63	31.95	-25.32	0-360	0
10	.6106	20.42	Pk	56.3	-32.2	-40	4.52	31.89	-27.37	0-360	90
11	1.0884	22.76	Pk	46.4	-32.1	-40	-2.94	26.89	-29.83	0-360	90
5	1.776	27.48	Pk	42.7	-32	-40	-1.82	29.5	-31.32	341	0
12	1.7766	27.12	Pk	42.7	-32	-40	-2.18	29.5	-31.68	96	90
6	21.8172	19.14	Pk	34.1	-31.5	-40	-18.26	29.5	-47.76	0-360	90

Pk - Peak detector

8.3. FCC TX SPURIOUS EMISSION 30 TO 1000 MHz

8.3.1. CONFIGURATION 1: WPT ON STANDBY



DATA

Radiated Emissions

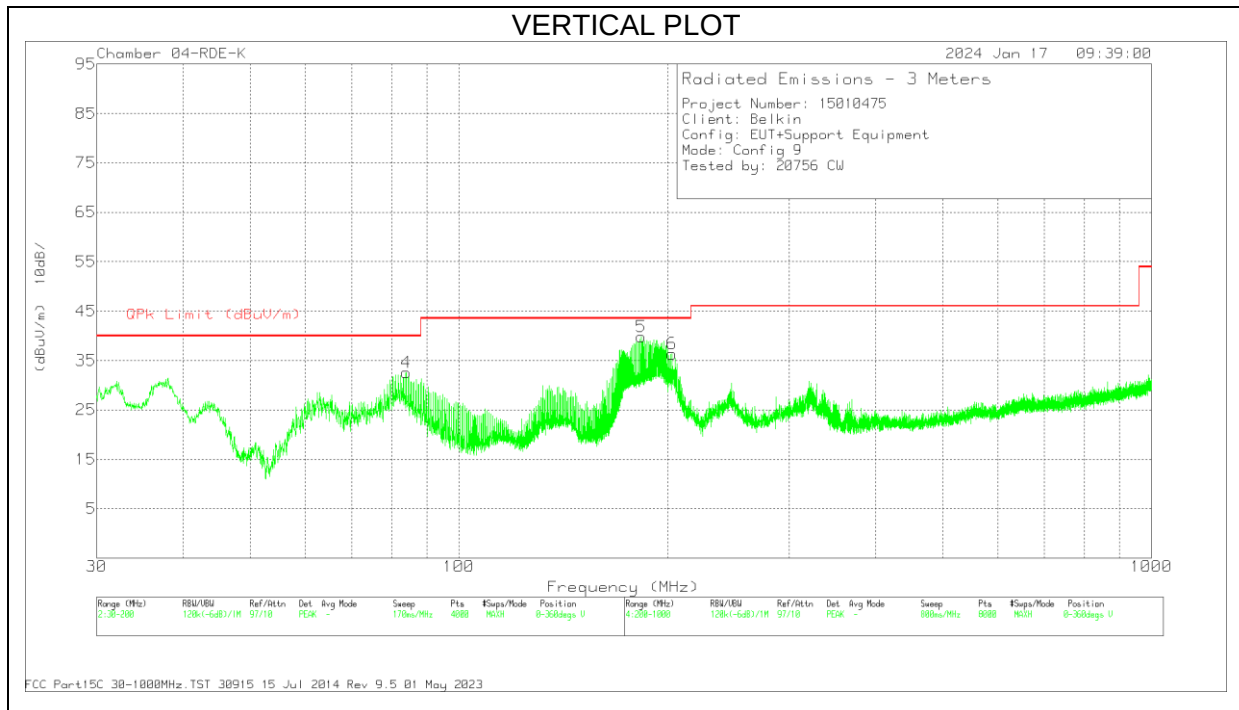
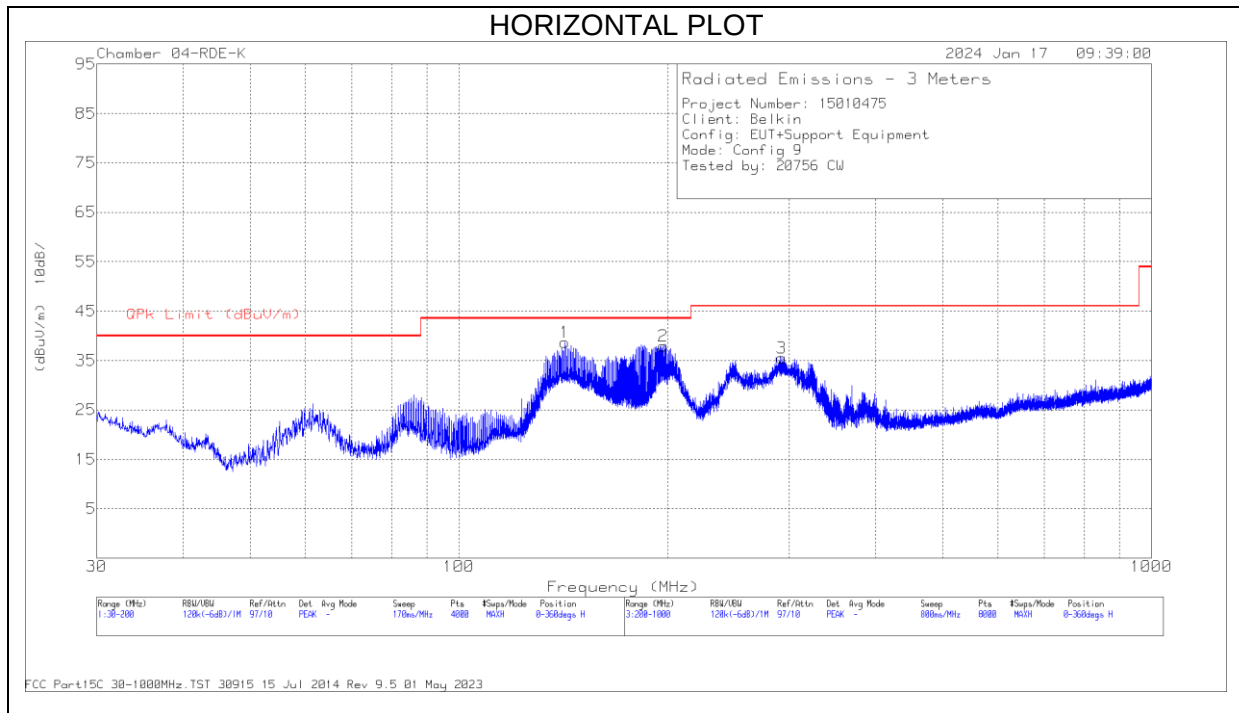
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	232075 ACF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
3	* 265.821	39.85	Qp	18.6	-29.5	28.95	46.02	-17.07	161	125	H
1	66.772	37.03	Pk	13.8	-31	19.83	40	-20.17	0-360	199	H
4	83.4363	42.97	Pk	13.4	-30.7	25.67	40	-14.33	0-360	101	V
2	140.061	40	Pk	19	-30.1	28.9	43.52	-14.62	0-360	199	H
5	194.688	36.78	Pk	17.9	-29.9	24.78	43.52	-18.74	0-360	101	V
6	369.322	35.74	Pk	20.7	-29.1	27.34	46.02	-18.68	0-360	199	V

* - indicates frequency in CFR47 Pt 15 / IC RSS-Restricted Band

Pk - Peak detector

Qp - Quasi-Peak detector

8.3.2. CONFIGURATION 9: OPERATING MODE WITH iPhone (360kHz) + iPhone (127.7kHz) + Watch (1.778MHz)



DATA

Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	232075 ACF (dB/m)	Amp/Cbl (dB)	Corrected Reading (dBuV/m)	QPk Limit (dBuV/m)	Margin (dB)	Azimuth (Degs)	Height (cm)	Polarity
4	83.904	49.93	Pk	13.4	-30.7	32.63	40	-7.37	0-360	100	V
1	142.192	42.27	Qp	18.9	-30.3	30.87	43.52	-12.65	122	198	H
5	183.235	49.49	Qp	17.2	-29.9	36.79	43.52	-6.73	135	100	V
2	197.276	47.1	Qp	18	-29.9	35.2	43.52	-8.32	30	115	H
6	203.035	42	Qp	17.5	-30.1	29.4	43.52	-14.12	99	134	V
3	292.712	45.63	Pk	19.3	-29.4	35.53	46.02	-10.49	0-360	99	H

Pk - Peak detector

Qp - Quasi-Peak detector

9. AC MAINS LINE CONDUCTED EMISSIONS

LIMITS

FCC §15.207 (a)

Frequency of Emission (MHz)	Conducted Limit (dBµV)	
	Quasi-peak	Average
0.15-0.5	66 to 56 *	56 to 46 *
0.5-5	56	46
5-30	60	50

*Decreases with the logarithm of the frequency.

ICES-001 Issue 5 Table 1

Table 1: Conducted emission limits for induction cooking appliances (AC mains terminals)				
Frequency range (MHz)	Appliances rated 120 V, without an earth connection	Appliances rated 120 V, without an earth connection	All other appliances	All other appliances
	Quasi-peak (dBµV)	Average (dBµV)	Quasi-peak (dBµV)	Average (dBµV)
0.009 – 0.05	122	—	110	—
0.05 – 0.15	102 to 92 *	—	90 to 80 *	—
0.15 – 0.5	72 to 62 *	62 to 52 *	66 to 56 *	56 to 46 *
0.5 – 5	56	46	56	46
5 – 30	60	50	60	50

Note: The more stringent limit applies at transition frequencies.
*The limit level in dBµV decreases linearly with the logarithm of frequency.

TEST PROCEDURE

The EUT is placed on a non-conducting table 40 cm from the vertical ground plane and 80 cm above the horizontal ground plane. The EUT is configured in accordance with ANSI C63.10.

The receiver is set to a resolution bandwidth of 200Hz for below 150kHz, 9kHz for 150kHz to 30MHz. Peak detection is used unless otherwise noted as quasi-peak or average.

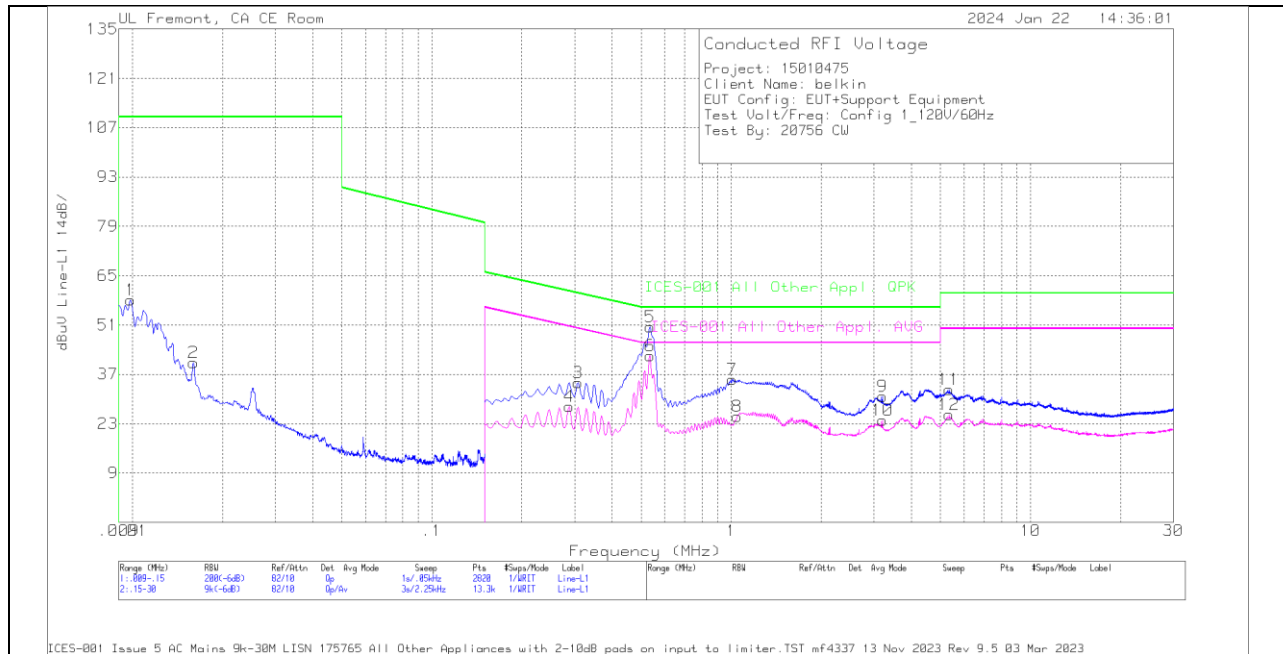
Line conducted data is recorded for both NEUTRAL and HOT lines.

RESULTS

Testing range from 9kHz to 30MHz using ICES-001 Issue Table 1 “All other appliances” limit to cover both FCC and ISSED frequency range.

9.1. CONFIGURATION 1: WPT ON STANDBY

LINE 1 RESULTS



WORST EMISSIONS

Range 1: Line-L1 .009 - .15MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN (dB)	Cbl (dB)	Trms Limiter (dB)	20dB Atten (dB)	Corrected Reading dBuV	ICIS-001 All Other Appl. QPK Limit (dBuV)	Margin (dB)	ICIS-001 All Other Appl. AVG Limit (dBuV)	Margin (dB)
1	.0099	20.94	Qp	4.4	-.3	13	20	58.04	110	-51.96	-	-
2	.016	6.98	Qp	2	-.1	11.5	20	40.38	110	-69.62	-	-

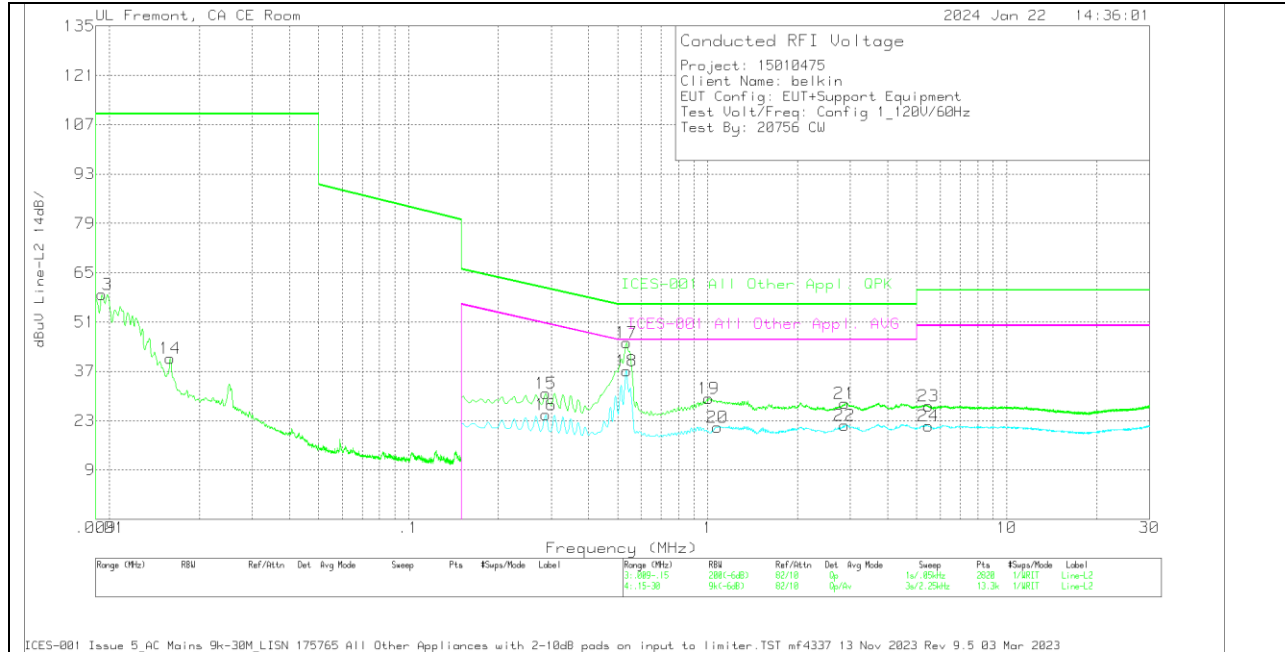
Qp - Quasi-Peak detector

Range 2: Line-L1 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN (dB)	Cbl (dB)	Trms Limiter (dB)	20dB Atten (dB)	Corrected Reading dBuV	ICIS-001 All Other Appl. QPK Limit (dBuV)	Margin (dB)	ICIS-001 All Other Appl. AVG Limit (dBuV)	Margin (dB)
4	.2873	-1.65	Av	0	.1	9.4	20	27.85	-	-	50.6	-22.75
6	.5348	12.95	Av	0	.1	9.3	20	42.35	-	-	46	-3.65
8	1.0455	-4.37	Av	0	.1	9.3	20	25.03	-	-	46	-20.97
10	3.201	-5.5	Av	0	.1	9.4	20	24	-	-	46	-22
12	5.3363	-3.94	Av	0	.1	9.4	20	25.56	-	-	50	-24.44
3	.3075	5.15	Qp	0	.1	9.4	20	34.65	60.04	-25.39	-	-
5	.5348	21.13	Qp	0	.1	9.3	20	50.53	56	-5.47	-	-
7	1.0073	6.2	Qp	0	0	9.4	20	35.6	56	-20.4	-	-
9	3.201	1.26	Qp	0	.1	9.4	20	30.76	56	-25.24	-	-
11	5.3363	3.26	Qp	0	.1	9.4	20	32.76	60	-27.24	-	-

Qp - Quasi-Peak detector

Av - Average detection

LINE 2 RESULTS



WORST EMISSIONS

Range 3: Line-L2 .009 - .15MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN (dB)	Cbl (dB)	Trns Limiter (dB)	20dB Atten (dB)	Corrected Reading dBuV	ICES-001 All Other Appl. QPK Limit (dBuV)	Margin (dB)	ICES-001 All Other Appl. AVG Limit (dBuV)	Margin (dB)
13	.0095	19.68	Qp	4.7	0	14.4	20	58.78	110	-51.22	-	-
14	.016	7.12	Qp	2.1	0	11.5	20	40.72	110	-69.28	-	-

Qp - Quasi-Peak detector

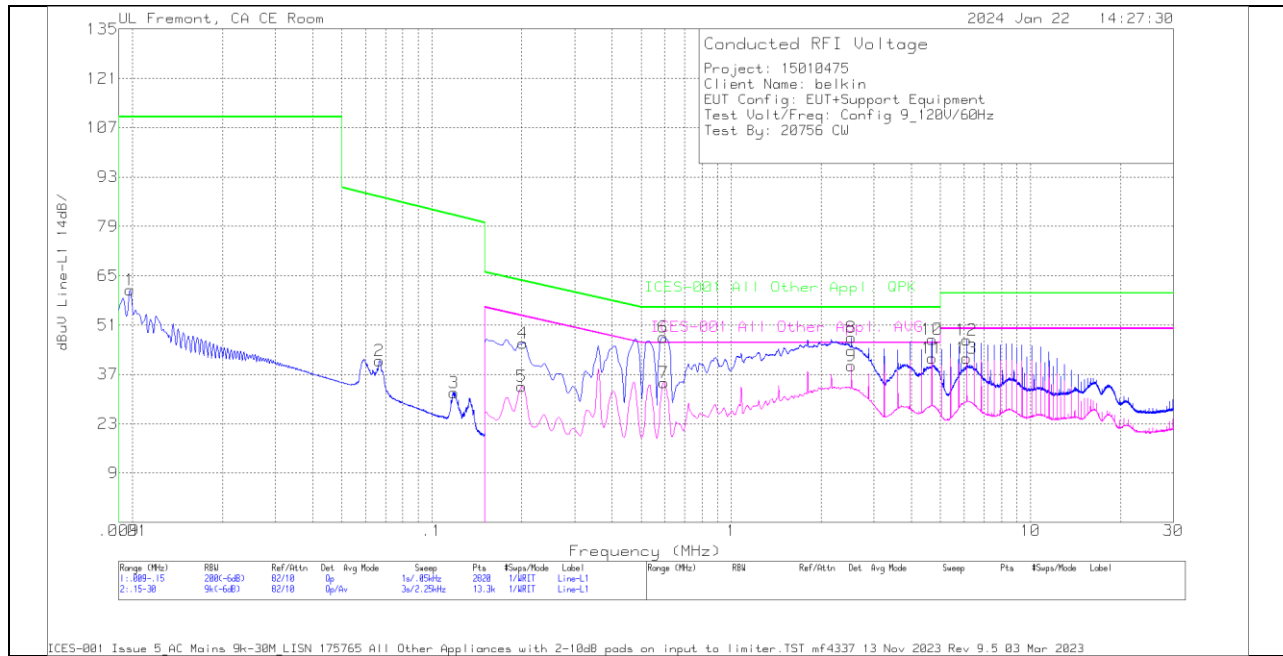
Range 4: Line-L2 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN (dB)	Cbl (dB)	Trns Limiter (dB)	20dB Atten (dB)	Corrected Reading dBuV	ICES-001 All Other Appl. QPK Limit (dBuV)	Margin (dB)	ICES-001 All Other Appl. AVG Limit (dBuV)	Margin (dB)
16	.2873	-4.88	Av	0	.1	9.4	20	24.62	-	-	50.6	-25.98
18	.5348	7.86	Av	0	0	9.3	20	37.16	-	-	46	-8.84
20	1.0759	-8.41	Av	0	.1	9.4	20	21.09	-	-	46	-24.91
22	2.8736	-7.81	Av	0	.1	9.4	20	21.69	-	-	46	-24.31
24	5.4791	-7.94	Av	0	.2	9.3	20	21.56	-	-	50	-28.44
15	.2873	1.25	Qp	0	.1	9.4	20	30.75	60.6	-29.85	-	-
17	.537	15.83	Qp	0	0	9.3	20	45.13	56	-10.87	-	-
19	1.0073	-11	Qp	0	0	9.4	20	29.29	56	-26.71	-	-
21	2.8725	-1.63	Qp	0	.1	9.4	20	27.87	56	-28.13	-	-
23	5.478	-2.29	Qp	0	.2	9.3	20	27.21	60	-32.79	-	-

Qp - Quasi-Peak detector

Av - Average detection

9.2. CONFIGURATION 9: OPERATING MODE WITH iPhone (360kHz) + iPhone (127.7kHz) + Watch (1.778MHz)

LINE 1 RESULTS



WORST EMISSIONS

Range 1: Line-L1 .009 - .15MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN (dB)	Cbl (dB)	Trns Limiter (dB)	20dB Atten (dB)	Corrected Reading dBuV	ICES-001 All Other Appl. QPK Limit (dBuV)	Margin (dB)	ICES-001 All Other Appl. AVG Limit (dBuV)	Margin (dB)
1	.0098	23.47	Qp	4.5	-.2	13.2	20	60.97	110	-49.03	-	-
2	.0669	11.13	Qp	0	0	9.8	20	40.93	87.35	-46.42	-	-
3	.1185	2.18	Qp	0	.1	9.6	20	31.88	82.15	-50.27	-	-

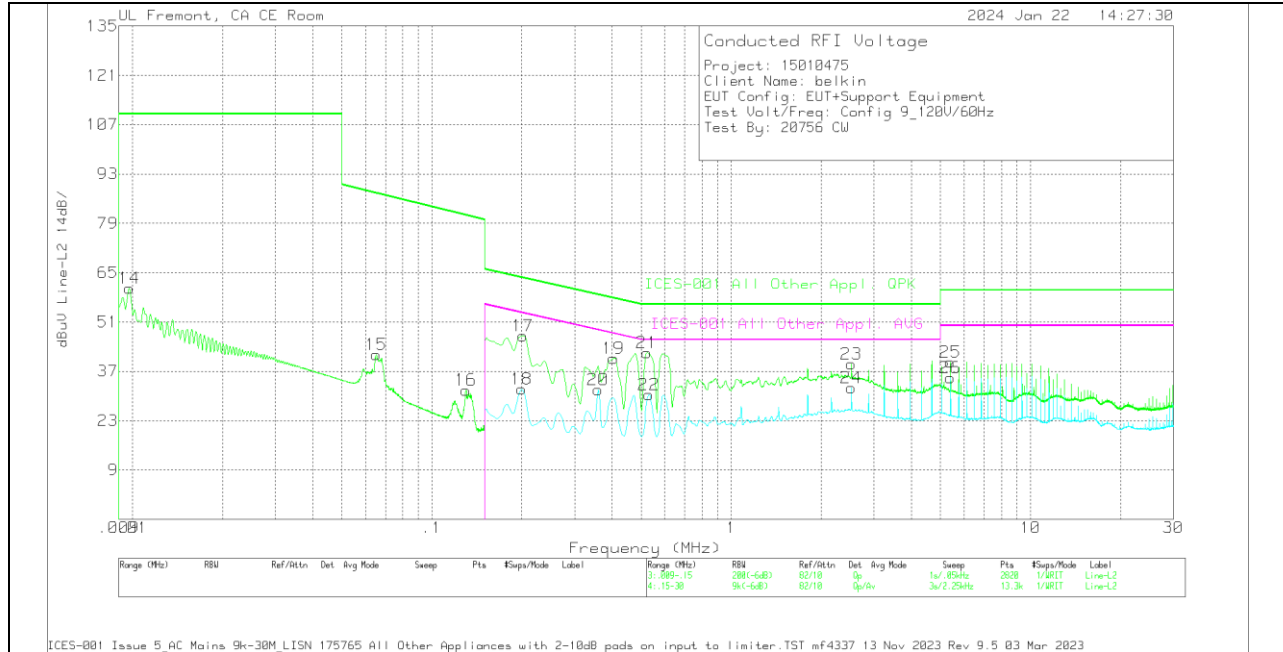
Qp - Quasi-Peak detector

Range 2: Line-L1 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN (dB)	Cbl (dB)	Trns Limiter (dB)	20dB Atten (dB)	Corrected Reading dBuV	ICES-001 All Other Appl. QPK Limit (dBuV)	Margin (dB)	ICES-001 All Other Appl. AVG Limit (dBuV)	Margin (dB)
5	.1995	4.14	Av	0	.1	9.4	20	33.64	-	-	53.63	-19.99
7	.5955	5.25	Av	0	0	9.4	20	34.65	-	-	46	-11.35
9	2.5193	10.12	Av	0	.1	9.3	20	39.52	-	-	46	-6.48
11	4.6793	12.02	Av	0	.1	9.4	20	41.52	-	-	46	-4.48
13	6.1193	11.92	Av	0	.2	9.4	20	41.52	-	-	50	-8.48
4	.2018	16.35	Qp	0	.1	9.4	20	45.85	63.54	-17.69	-	-
6	.5933	18.13	Qp	0	0	9.4	20	47.53	56	-8.47	-	-
8	2.5193	18.05	Qp	0	.1	9.3	20	47.45	56	-8.55	-	-
10	4.6793	17.4	Qp	0	.1	9.4	20	46.9	56	-9.1	-	-
12	6.1193	17.2	Qp	0	.2	9.4	20	46.8	60	-13.2	-	-

Qp - Quasi-Peak detector

Av - Average detection

LINE 2 RESULTS



WORST EMISSIONS

Range 3: Line-L2 .009 - .15MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN (dB)	Cbl (dB)	Trns Limiter (dB)	20dB Atten (dB)	Corrected Reading dBuV	ICES-001 All Other Appl. QPK Limit (dBuV)	Margin (dB)	ICES-001 All Other Appl. AVG Limit (dBuV)	Margin (dB)
14	.0098	22.52	Qp	4.6	.1	13.4	20	60.62	110	-49.38	-	-
15	.0652	11.99	Qp	0	0	9.8	20	41.79	87.58	-45.79	-	-
16	.1301	2.11	Qp	0	.1	9.5	20	31.71	81.3	-49.59	-	-

Qp - Quasi-Peak detector

Range 4: Line-L2 .15 - 30MHz												
Marker	Frequency (MHz)	Meter Reading (dBuV)	Det	LISN (dB)	Cbl (dB)	Trns Limiter (dB)	20dB Atten (dB)	Corrected Reading dBuV	ICES-001 All Other Appl. QPK Limit (dBuV)	Margin (dB)	ICES-001 All Other Appl. AVG Limit (dBuV)	Margin (dB)
18	.1995	2.49	Av	0	.1	9.4	20	31.99	-	-	53.63	-21.64
20	.3593	2.38	Av	0	.1	9.4	20	31.88	-	-	48.75	-16.87
22	.5314	1.04	Av	0	0	9.3	20	30.34	-	-	46	-15.66
24	2.5193	2.92	Av	0	.1	9.3	20	32.32	-	-	46	-13.68
26	5.3993	5.63	Av	0	.2	9.4	20	35.23	-	-	50	-14.77
17	.2018	17.55	Qp	0	.1	9.4	20	47.05	63.54	-16.49	-	-
19	.4043	11.14	Qp	0	.1	9.4	20	40.64	57.77	-17.13	-	-
21	.5235	12.97	Qp	0	0	9.3	20	42.27	56	-13.73	-	-
23	2.5193	9.63	Qp	0	.1	9.3	20	39.03	56	-16.97	-	-
25	5.3993	9.99	Qp	0	.2	9.4	20	39.59	60	-20.41	-	-

Qp - Quasi-Peak detector

Av - Average detection

10. DESCRIPTION OF TEST SETUP AND SETUP PHOTOS

Please refer to 15010475-EP1 (FCC) for description of test up and setup photo.

END OF TEST REPORT