



*FCC PART 15, SUBPART B and C; and FCC SECTION 15.247; RSS-247 and RSS-GEN
TEST REPORT*

for

AIDA THERMOSTAT AND AIDA CONTROLLER

Models: 6700 and 6800

Prepared for

TELKONET, INC.
20800 SWENSON DRIVE, SUITE 175
WAUKESHA, WISCONSIN 53186

Prepared by: _____

JAMES ROSS

Approved by: _____

KYLE FUJIMOTO

COMPATIBLE ELECTRONICS INC.
114 OLINDA DRIVE
BREA, CALIFORNIA 92823
(714) 579-0500

DATE: MARCH 30, 2023

	REPORT BODY	APPENDICES					TOTAL
		A	B	C	D	E	
PAGES	22	2	2	2	21	99	148

This report shall not be reproduced except in full, without the written approval of Compatible Electronics.



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



TABLE OF CONTENTS

Section / Title	PAGE
GENERAL REPORT SUMMARY	4
SUMMARY OF TEST RESULTS	5
1. PURPOSE	6
1.1 Decision Rule & Risk	6
2. ADMINISTRATIVE DATA	7
2.1 Location of Testing	7
2.2 Traceability Statement	7
2.3 Cognizant Personnel	7
2.4 Date Test Sample was Received	7
2.5 Disposition of the Test Sample	7
2.6 Abbreviations and Acronyms	7
3. APPLICABLE DOCUMENTS	8
4. DESCRIPTION OF TEST CONFIGURATION	9
4.1 Description of Test Configuration – Emissions	10
4.1.1 Cable Construction and Termination	10
5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT	11
5.1 EUT and Accessory List	11
5.2 Emissions Test Equipment	11
6. TEST SITE DESCRIPTION	13
6.1 Test Facility Description	13
6.2 EUT Mounting, Bonding and Grounding	13
6.3 Measurement Uncertainty	13
7. CHARACTERISTICS OF THE TRANSMITTER	14
7.1 Channel Number and Frequencies	14
7.2 Antenna	14
8. TEST PROCEDURES	15
8.1 RF Emissions	15
8.1.1 Conducted Emissions Test	15
8.1.2 Radiated Emissions Test	16
8.1.3 RF Emissions Test Results	17
8.1.4 Sample Calculations	18
8.2 DTS Bandwidth	19
8.3 Maximum Peak Conducted Output Power	19
8.4 RF Antenna Conducted Test	20
8.5 RF Band Edges	20
8.6 Spectral Density Test	21
8.7 99 % Bandwidth	21
8.8 Variation of the Input Power	21
9. CONCLUSIONS	22



LIST OF APPENDICES

APPENDIX	TITLE
A	Laboratory Accreditations and Recognitions
B	Modifications to the EUT
C	Models Covered Under This Report
D	Diagrams and Charts <ul style="list-style-type: none">• Test Setup Diagrams• Antenna and Effective Gain Factors
E	Data Sheets

LIST OF FIGURES

FIGURE	TITLE
1	Conducted Emissions Test Setup
2	Layout of the Semi-Anechoic Test Chamber

LIST OF TABLES

TABLE	TITLE
1	Conducted Emission Results
2	Radiated Emission Results

GENERAL REPORT SUMMARY

This electromagnetic emission test report is generated by Compatible Electronics Inc., which is an independent testing and consulting firm. The test report is based on testing performed by Compatible Electronics personnel according to the measurement procedures described in the test specifications given below and in the "Test Procedures" section of this report.

The measurement data and conclusions appearing herein relate only to the sample tested and this report may not be reproduced without the written permission of Compatible Electronics, unless done so in full.

This report must not be used by the client to claim product certification, approval or endorsement by NVLAP, NIST or any agency of the U.S. Government.

Device Tested: Aida Thermostat and Aida Controller
Models: 6700 and 6800
S/N: N/A

Product Description: The Aida Thermostat and Aida Controller wire into an HVAC system and automatically learns and adapts to the heating and cooling patterns of each room in the system. Clock Frequencies: 32.768 kHz, 12 MHz, 16 MHz, 40 MHz, 48 MHz, 96 MHz and 2.4 GHz. Dimensions (both devices combined): 4" (W) x 6" (L) x 1" (H)

Modifications: The EUT was not modified in order to meet the specifications.

Customer: Telkonet, Inc.
20800 Swenson Drive, Suite 175
Waukesha, Wisconsin 53186

Test Dates: February 14, 15, 17, 22, 23 and 24, 2023

Test Specification covered by accreditation:



Test Specifications: Emissions requirements
CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.247; RSS-247 and RSS-GEN

Test Procedures: ANSI C63.4 and ANSI C63.10

Test Deviations: The test procedure was not deviated from during the testing.



SUMMARY OF TEST RESULTS

TEST	DESCRIPTION	RESULTS
1	Conducted RF Emissions, 150 kHz - 30 MHz	Complies with the Class B limits of CFR Title 47, Part 15 Subpart B; and the limits of CFR Title 47, Part 15, Subpart C, section 15.207; RSS-247 and RSS-GEN See section 6.3 for Measurement Uncertainty.
2	Radiated RF Emissions, 9 kHz – 25000 MHz	Complies with the Class B limits of CFR Title 47, Part 15, Subpart B; and the limits of CFR Title 47, Part 15 Subpart C, 15.205, 15.209 and 15.247 (d); RSS-247 and RSS-GEN See section 6.3 for Measurement Uncertainty.
3	DTS Bandwidth	Complies with the relevant requirements of CFR Title 47, Part 15, Subpart C, section 15.247 (a)(2); RSS-247
4	Peak Output Power	Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (b)(3); RSS-247
5	Fundamental and Emissions produced by the intentional radiator in non-restricted bands, 9 kHz – 25 GHz	Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (d); RSS-247 and RSS-GEN
6	Spectral Density	Complies with the relevant requirements of FCC Title 47, Part 15, Subpart C, section 15.247 (e); RSS-247



1. PURPOSE

This document is a qualification test report based on the emissions tests performed on the Aida Thermostat and Aida Controller, Models: 6700 and 6800 (EUT). The emissions measurements were performed according to the measurement procedure described in ANSI C 63.4 and ANSI C63.10. The tests were performed in order to determine whether the electromagnetic emissions from the equipment under test, referred to as EUT hereafter, are within the Class B specification limits defined by CFR Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.247; RSS-247 and RSS-Gen.

1.1 DECISION RULE & RISK

If a measured value exceeds a specification limit it implies non-compliance. If the value is below a specification limit it implies compliance. Measurement uncertainty of the laboratory is reported with all measurement results but generally not taken into consideration unless a standard, rule or law requires it to be considered.

Qualification test reports are only produced for products that are in compliance with the test requirements, therefore results are always in conformity. Otherwise, an engineering report or just the data is provided to the customer.

When performing a measurement and making a statement of conformity, in or out-of-specification to manufacturer's specifications or Pass/Fail against a requirement, there are two possible outcomes:

- The result is reported as conforming with the specification
- The result is reported as not conforming with the specification

The decision rule is defined below.

When the test result is found to be below the limit but within our measurement uncertainty of the limit, it is our policy that the final acceptance decision is left to the customer, after discussing the implications and potential risks of the decision.

When the test result is found to be exactly on the specification, it is our policy, in the case of unwanted emissions measurements to consider the result non-compliant; however, the final decision is left to the customer, after discussing the implications and potential risks of the decision.

When the test result is found to be over the specification limit under any condition, it is our policy to consider the result non-compliant.

In terms of uncertainty of measurement, the laboratory is a calibrated and tightly controlled environment and generally exceptionally stable, the measurement uncertainties are evaluated without the consideration of the test sample. When it comes to the test sample however, as most testing is performed on a single sample rather than a sample population, and that sample is often a pre-production representation of the final product that test sample represents a significantly higher source of measurement uncertainty. We advise our customers of this and that when in doubt (small test to limit margins), they may wish to perform statistical sampling on a population to gain a higher confidence in the results. All lab reported results are that of a single sample in any event.



2. ADMINISTRATIVE DATA

2.1 Location of Testing

The emissions tests described herein were performed at the test facility of Compatible Electronics, 114 Olinda Drive, Brea, California 92823.

2.2 Traceability Statement

The calibration certificates of all test equipment used during the test are on file at the location of the test. The calibration is traceable to the National Institute of Standards and Technology (NIST).

2.3 Cognizant Personnel

Telkonet, Inc.

Jeffrey Sobieski	CTO
Andy Pozsgay	Lead Firmware Engineer

Compatible Electronics Inc.

James Ross	Sr. Test Engineer
Kyle Fujimoto	Sr. Test Engineer

2.4 Date Test Sample was Received

The test sample was received as described in the product description just prior to the initial testing.

2.5 Disposition of the Test Sample

The test sample has not been returned to Telkonet, Inc. as of the date of this test report.

2.6 Abbreviations and Acronyms

The following abbreviations and acronyms may be used in this document.

EMI	Electromagnetic Interference	IR	Infrared
EUT	Equipment Under Test	GND	Ground
RSS	Radio Standards Specification	Tx	Transmit
ITE	Information Technology Equipment	Rx	Receive
DoC	Declaration of Conformity	Inc.	Incorporated
ANSI	American National Standards Institute	RF	Radio Frequency
N.C.R.	No Calibration Required	dB μ V	Decibels in Micro-Volts
CTO	Chief Technology Officer	M/N	Model Number
LLC	Limited Liability Company	P/N	Part Number
FCC	Federal Communications Commission	IC	Industry Canada
NTC	Negative Temperature Coefficient	N/A	Not Applicable
HVAC	Heating, Ventilation, and Air Conditioning	S/N	Serial Number
ISED	Innovation, Science and Economic Development	RS	Recommended Standard
BLE	Bluetooth Low Energy	USB	Universal Serial Bus



3. APPLICABLE DOCUMENTS

The following documents are referenced or used in the preparation of this emissions Test Report.

SPEC	TITLE
FCC Title 47, Part 15 Subpart C	FCC Rules – Radio frequency devices (including digital devices) – Intentional Radiators
FCC Title 47, Part 15 Subpart B	FCC Rules – Radio frequency devices (including digital devices) – Unintentional Radiators
558074 D01 DTS Meas Guidance v05r02	Guidance for Performing Compliance Measurements on Digital Transmissions Systems (DTS) Operating Under Section 15.247
EN 50147-2: 1997	Anechoic chambers. Alternative test site suitability with respect to site attenuation
ANSI C63.4 2014	American National Standard for Methods of Measurement of Radio-Noise Emissions from Low-Voltage Electrical and Electronic Equipment in the Range of 9 kHz to 40 GHz
ANSI C63.10 2013	American National Standard for Testing Unlicensed Wireless Devices
RSS-Gen Issue 5 April 2018 Amendment 1: March 2010 Amendment 2: February 2021	General Requirements for Compliance of Radio Apparatus
RSS-247 Issue 2 February 2017	Digital Transmissions Systems (DTSS), Frequency Hopping Systems (FHSs) and License-Exempt Local Area Network (LE-LAN) Devices

4. DESCRIPTION OF TEST CONFIGURATION

4.1 Description of Test Configuration – Emissions

The EUT was tested in two configurations: (1) With Display, Aida Thermostat, M/N: 6700 (EUT); and (2) Without Display, Aida Controller, M/N: 6800 (EUT). Both configurations were set up exactly the same and contained all of the same attached cables. The difference was that the 6700 (EUT) setup also contained a display affixed within its nonconductive enclosure; while the 6800 (EUT) setup had no affixed display within its nonconductive enclosure. All cables were thus only attached with the like enclosure of both the 6700 and 6800 units during all testing.

Both test units, contained one 9-pin header containing input power (24-277 VAC) and six relay outputs; two 10-pin headers containing RS485, analog outputs, dry contact inputs, NTC thermistor inputs, and current transformer inputs. Further, both test units connected to an accessory RS-485 mini PCB.

During testing, both configurations through the Aida Controller, were continuously communicating BLE, Zigbee, and WiFi.

Note: The BLE and WiFi are from fully certified RF modules.

The EUT was tested for emissions while in the X, Y and Z axis. The X orientation is when the EUT is parallel to the ground mounted horizontally. The Y orientation is when the EUT is perpendicular to the ground mounted vertically. The Z orientation is when the EUT is perpendicular to the ground mounted horizontally.

The firmware on an accessory laptop allowed the EUT to continuously transmit at the low, middle, or high channels.

The firmware is stored on the company's servers.

The radiated and conducted data was taken in the continuously exercising mode of operation. All initial investigations were performed with the EMI Receiver in manual mode scanning the frequency range continuously. The cables were bundled and routed as shown in the photographs in Appendix D.



4.1.1 Cable Construction and Termination

Cable 1

This is a 3-meter long unshielded, nine wire cable connecting the EUT (three wires) to the AC public mains with six wires unterminated. The cable has a 9-pin terminal block at the EUT end and is connected to the AC public mains on three of its wires, while the other six wires are unterminated. The cable was bundled to a length of 1-meter.

Cable 2

This is a 3-meter long unshielded cable connecting the EUT (four wires) to an RS-485 board with six wires unterminated. The cable has a 10-pin terminal block at the EUT and is connected to the RS-485 board on four of its wires, while the other six wires are unterminated. The cable was bundled to a length of 1-meter.

Cable 3

This is a 3-meter long unshielded cable connected to the EUT (ten wires). The cable has a 10-pin terminal block at the EUT and its ten wires are unterminated at the other end. The cable was bundled to a length of 1-meter.

Cable 4*

This is a 2-meter long unshielded cable connecting the EUT to the laptop. The cable has a 4-pin terminal block at the EUT and a USB type 'A' connector at the laptop end.

*Only used to program the EUT and was then removed



5. LISTS OF EUT, ACCESSORIES AND TEST EQUIPMENT

5.1 EUT and Accessory List

EQUIPMENT	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	FCC ID / IC ID
AIDA THERMOSTAT (EUT)	TELKONET, INC.	6700	N/A	FCC: XV6AIDA IC: 22341-AIDA
AIDA CONTROLLER (EUT)	TELKONET, INC.	6800	N/A	FCC: XV6AIDA IC: 22341-AIDA
LAPTOP COMPUTER	DELL	VOSTRO 14 3000	DQNH703	N/A
AC/DC ADAPTER (LAPTOP)	DELL	LA45NM140	N/A	N/A
RS-485 MINI PCB	N/A	P/N: ETG2CAO R1	N/A	N/A
BLE & WIFI MODULE	ESPRESSIF SYSTEMS	ESP-WROVER-E	N/A	FCC: 2AC7Z- ESP32WROVERE IC: 21098-ESPWROVERE
RF TEST TOOL FIRMWARE	ESPRESSIF SYSTEMS	VERSION 2.8	N/A	N/A



5.2 Emissions Test Equipment

EQUIPMENT TYPE	MANUFACTURER	MODEL NUMBER	SERIAL NUMBER	CAL. DATE	CAL. DUE DATE
RF RADIATED AND AC CONDUCTED EMISSIONS TEST EQUIPMENT					
TDK TestLab	TDK RF Solutions, Inc.	9.22	700145	N/A	N/A
EMI Receiver, 3 Hz – 44 GHz	Keysight Technologies, Inc.	N9038A	MY559050117	November 9, 2022	November 9, 2023
System Controller	Sunol Sciences Corporation	SC110V	112213-1	N/A	N/A
Turntable	Sunol Sciences Corporation	2011VS	N/A	N/A	N/A
Antenna-Mast	Sunol Sciences Corporation	TWR95-4	112213-3	N/A	N/A
Loop Antenna	Com-Power	AL-130R	121090	February 10, 2022	February 10, 2025
CombiLog Antenna	Com-Power	AC-220	61093	December 14, 2021	December 14, 2023
Horn Antenna	Com-Power	AH-118	10050113	December 16, 2021	December 16, 2023
Preamplifier	Com-Power	PA-118	181653	March 7, 2022	March 7, 2023
Horn Antenna	Com-Power	AH-826	71957	N/A	N/A
Preamplifier	Com-Power	PA-840	711013	April 8, 2022	April 8, 2024
Variable Autotransformer	Staco Energy Products	3PN2210	003	N/A	N/A
LISN (EUT)	Com-Power	LI-215A	191951	August 16, 2022	August 16, 2023
LISN (ACCY)	Com-Power	LI-215A	191952	August 16, 2022	August 16, 2023
Attenuator 10 dB	SureCall	SC-ATT-10	17100174	December 2, 2022	December 2, 2023
Computer	Hewlett Packard	p6716f	MXX1030PX0	N/A	N/A
True RMS Multimeter	Fluke	115	36601149WS	November 21, 2021	November 21, 2023
LCD Monitor	Hewlett Packard	52031a	3CQ046N3MG	N/A	N/A



6. TEST SITE DESCRIPTION

6.1 Test Facility Description

Please refer to section 2.1 and 7.1 of this report for emissions test location.

6.2 EUT Mounting, Bonding and Grounding

For frequencies 1 GHz and below: The EUT was mounted on a 0.6 by 1.2 meter non-conductive table 0.8 meters above the ground plane.

For frequencies above 1 GHz: The EUT was mounted on a 0.6 by 1.2 meter non-conductive table 1.5 meters above the ground plane.

The EUT was grounded via the 3rd wire ground of the connected AC power cord.

6.3 Measurement Uncertainty

“Compatible Electronics” U_{lab} value is less than U_{cispr} , thus based on this – compliance is deemed to occur if no measured disturbance exceeds the disturbance limit.

The uncertainty represents an expanded uncertainty expressed at approximately the 95% confidence level, using a coverage factor of $k=2$

$$u_c(y) = \sqrt{\sum_1^n c_i^2 u^2(x_i)}$$

Measurement		U_{cispr}	$U_{lab} = 2u_c(y)$
Conducted disturbance (mains port)	(150 kHz – 30 MHz)	3.4 dB	2.72 dB
Radiated disturbance (electric field strength on an open area test site or alternative test site)	(30 MHz – 1,000 MHz)	6.3 dB	3.32 dB (Vertical) 3.30 dB (Horizontal)
Radiated disturbance (electric field strength on an open area test site or alternative test site)	(1 GHz – 6 GHz)	5.2 dB	4.06 dB
Radiated disturbance (electric field strength on an open area test site or alternative test site)	(6 GHz – 18 GHz)	5.5 dB	4.06 dB
Radiated disturbance (electric field strength on an open area test site or alternative test site)	(18 GHz – 26 GHz)	N/A	4.43 dB
Radiated disturbance (electric field strength on an open area test site or alternative test site)	(26.5 GHz – 40 GHz)	N/A	4.57 dB



7. CHARACTERISTICS OF THE TRANSMITTER

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

7.1 Channel Number and Frequencies

The EUT uses a total of 16 channels which are spaced 5 MHz apart.

The lowest channel is 2405 MHz

The highest channel is 2480 MHz

7.2 Antenna

The EUT has a +1.5 dBi gain dipole antenna.



8. TEST PROCEDURES

The following sections describe the test methods and the specifications for the tests. Test results are also included in this section.

8.1 RF Emissions

8.1.1 Conducted Emissions Test

The EMI Receiver was used as a measuring meter. A quasi-peak and/or average reading was taken only where indicated in the data sheets. A 10 dB attenuator used for the protection of the EMI Receiver input stage, and the offset was adjusted accordingly to read the actual data measured. The LISN output was measured using the EMI Receiver. The output of the second LISN was terminated by a 50-ohm termination. The effective measurement bandwidth used for this test was 9 kHz.

Please see section 6.2 of this report for mounting, bonding, and grounding of the EUT. The EUT was powered through the LISN, which was bonded to the ground plane. The LISN power was filtered and the filter was bonded to the ground plane. The EUT was set up with the minimum distances from any conductive surfaces as specified in ANSI 63:4. The excess power cord was wrapped in a figure eight pattern to form a bundle not exceeding 0.4 meters in length.

The conducted emissions from the EUT were maximized for operating mode as well as cable placement. The final data was collected under program control by computer software. The final qualification data is located in Appendix E.

The six highest emissions are listed in Table 1.

Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15 Subpart B; the limits of CFR Title 47, Part 15, Subpart C, Section 15.207; and RSS-Gen for conducted emissions.

8.1.2 Radiated Emissions Test

The EMI Receiver was used as the measuring meter. Preamplifiers were used to increase the sensitivity of the instrument. The EMI Receiver was initially used with the Analyzer mode feature activated. In this mode, the EMI receiver can then record the actual frequency to be measured. This final reading is then taken accurately in the EMI Receiver mode, which takes into account the cable loss, amplifier gain and antenna factors, so that a true reading is compared to the true limit. The effective measurement bandwidth used for the radiated emissions test was according to the frequency measured.

The frequencies below 1 GHz were quasi-peaked using the quasi-peak detector of the EMI Receiver.

The frequencies above 1 GHz were averaged using the RMS detector average function on the EMI Receiver.

The EMI test chamber of Compatible Electronics, Inc. was used for radiated emissions testing. This test site is in full compliance with ANSI C63.4. Please see section 6.2 of this report for mounting, bonding and grounding of the EUT. The turntable supporting the EUT is remote controlled using a motor. The turntable permits EUT rotation of 360 degrees in order to maximize emissions. Also, the antenna mast allows height variation of the antenna from 1 meter to 4 meters. Data was collected in the worst case (highest emission) configuration of the EUT. At each reading, the EUT was rotated 360 degrees and the antenna height was varied from 1 to 4 meters (for E field radiated field strength). The gunsight method was used when measuring with the horn antenna in order to ensure accurate results.

The EUT was tested at a 3-meter test distance. The six highest emissions are listed in Table 2.

The measurement bandwidths and transducers used for the radiated emissions test were:

FREQUENCY RANGE	EFFECTIVE MEASUREMENT BANDWIDTH	TRANSDUCER
9 kHz to 150 kHz	200 Hz	Loop Antenna
150 kHz to 30 MHz	9 kHz	Loop Antenna
30 MHz to 1 GHz	120 kHz	CombiLog Antenna
1 GHz to 25 GHz	1 MHz	Horn Antenna

Test Results:

The EUT complies with the **Class B** limits of CFR Title 47, Part 15, Subpart B; the limits of CFR Title 47, Part 15, Subpart C sections 15.205, 15.209 and 15.247; and the limits of RSS-247 and RSS-Gen for radiated emissions.



8.1.3 RF Emissions Test Results

Table 1 CONDUCTED EMISSION RESULTS
Aida Thermostat and Aida Controller
Models: 6700 and 6800

Frequency (MHz)	Average Emission Level* (dBμV/m)	Average Specification Limit (dBμV/m)	Delta (Emission – Spec limit) (dB)
13.894 (BL) (WD)	44.71	50.00	-5.29
13.870 (BL) (WD)	44.30	50.00	-5.70
13.886 (BL) (WD)	43.68	50.00	-6.32
13.794 (BL) (WD)	43.20	50.00	-6.80
13.854 (BL) (WD)	43.13	50.00	-6.87
13.494 (BL) (WD)	42.80	50.00	-7.20

Table 2 RADIATED EMISSION RESULTS
Aida Thermostat and Aida Controller
Models: 6700 and 6800

Frequency (MHz)	Average EMI Reading* (dBμV/m)	Specification Limit (dBμV/m)	Delta (Cor. Reading – Spec. Limit) (dB)
2483.50 (V) (BE) (WD) (HC) (Y-Axis)	53.81	53.97	-0.16
2483.50 (V) (BE) (ND) (HC) (Y-Axis)	53.69	53.97	-0.28
2483.50 (H) (BE) (WD) (HC) (Z-Axis)	53.66	53.97	-0.31
2483.50 (H) (BE) (ND) (HC) (Z-Axis)	53.62	53.97	-0.35
4960.00 (H) (Tx) (ND) (HC) (Y-Axis)	49.29	53.97	-4.68
4880.00 (H) (Tx) (WD) (MC) (Y-Axis)	48.60	53.97	-5.37

Notes: * The complete emissions data is given in Appendix E of this report.

(BL) Black Lead
(WL) White Lead
(V) Vertical
(H) Horizontal
(LC) Low Channel
(MC) Middle Channel
(HC) High Channel
(WD) With Display
(ND) No Display
(Tx) Transmit Mode



8.1.4

Sample Calculations

A correction factor for the antenna, cable and a distance factor (if any) must be applied to the meter reading before a true field strength reading can be obtained. This Corrected Meter Reading is then compared to the specification limit in order to determine compliance with the limits.

Conversion to logarithmic terms: Specification limit ($\mu\text{V}/\text{m}$) $\log \times 20$ = Specification Limit in dBuV/m

To correct for distance when measuring at a distance other than the specification

For measurements below 30 MHz: (Specification distance / test distance) $\log \times 40$ = distance factor

For measurements above 30 MHz: (Specification distance / test distance) $\log \times 20$ = distance factor

Note: When using an Active Antenna, the Antenna factor shall be subtracted due to the combination of the internal amplification and antenna loss.

Corrected Meter Reading = meter reading + F – A + C

where: F = antenna factor

A = amplifier gain

C = cable loss

The correction factors for the antenna and the amplifier gain are attached in Appendix D of this report. The data sheets are attached in Appendix E.

The distance factor D is 0 when the test is performed at the required specification distance.

8.2 DTS Bandwidth

The DTS Bandwidth was measured using the EMI Receiver. The following steps were performed for measuring the DTS Bandwidth.

1. Set RBW = 100 kHz
2. Set the video bandwidth (VBW) to equal or greater than 3 times the RBW
3. Detector = Peak
4. Trace Mode = Max Hold
5. Sweep = Auto Couple
6. Allow the trace to stabilize
7. Measure the maximum width of the emission that is constrained by the frequencies associated with the two outermost amplitude points (upper and lower frequencies) that are attenuated by 6 dB relative to the maximum level measured in the fundamental emission.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (a) (2); and RSS-247.

8.3 Maximum Peak Conducted Output Power

The Maximum Peak Conducted Output Power was measured using the EMI Receiver. The Maximum Peak Conducted Output Power was measured using the procedure described in section 11.9.1.1 of ANSI C63.10. The Maximum Peak Conducted Output Power was then taken. The following steps were performed for measuring the Maximum Peak Conducted Output Power.

1. Set the $RBW \geq$ DTS bandwidth
2. Set $VBW \geq [3 \times RBW]$
3. Set $span \geq [3 \times RBW]$
4. Sweep time = auto couple
5. Detector = peak
6. Trace mode = max hold
7. Allow trace to fully stabilize
8. Use peak marker function to determine the peak amplitude level

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (b) (3); and RSS-247. The maximum peak output power is less than 1 Watt. Please see the data sheets located in Appendix E.

8.4 Emissions in Non-restricted Frequency Bands

The emissions in the non-restricted frequency bands measurements were performed using the EMI receiver directly connected to the EUT. The reference level was established by setting the instrument center frequency to the DTS channel center frequency. The span was set to ≥ 1.5 times the DTS bandwidth. The RBW was set to 100 kHz and the VBW was set to 300 kHz. A peak detector was used with sweep set to auto. A max hold trace was used and allowed to fully stabilize. The peak marker function was used to determine the reference level. For emission level measurement, the center frequency and span were set to encompass the frequency range to be measured. The RBW was set to 100 kHz and the VBW was set to 300 kHz. A peak detector was used with a sweep time set to auto. The number of measurement points were greater than the span/RBW. A max hold trace was used and allowed to fully stabilize. The peak marker function was used to determine the maximum amplitude level. The final qualification data sheets are located in Appendix E.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (d); and RSS-247.

8.5 RF Band Edges

The RF band edges were taken at 2390 MHz when the EUT was on the low channel and 2483.5 MHz when the EUT was on the high channel using the EMI Receiver. A preamplifier was used to boost the signal level, with the plots being taken at a 3 meter test distance. The radiated emissions test procedure as describe in section 8.1.2 of this test report was used to maximize the emission.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (d); and RSS-247. The RF power at the restricted bands closest to the band edges at 2390 MHz and 2483.5 MHz also meet the limits of section 15.209. Please see the data sheets located in Appendix E.

8.6 Spectral Density Test

The spectrum density output was measured using the EMI Receiver. The spectral density output was measured using a direct connection from the RF out on the EUT into the input of the EMI Receiver. The following steps were performed for measuring the spectral density.

1. Set analyzer center frequency to DTS channel center frequency
2. Set the span to 1.5 times the OBW.
3. Set the RBW to $3 \text{ kHz} \leq \text{RBW} \leq 100 \text{ kHz}$
4. Set the VBW $\geq [3 \times \text{RBW}]$
5. Detector = peak
6. Sweep time = auto couple
7. Trace mode = max hold
8. Allow the trace to fully stabilize.
9. Use the peak marker function to determine the maximum amplitude level within the RBW
10. If measured value exceeds limit, reduce RBW (no less than 3 kHz) and repeat.

Test Results:

The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart C section 15.247 (e); and RSS-247.

8.7 99 % Bandwidth

The 99 % bandwidth was measured using an EMI Receiver.

The following steps were performed for measuring the 99 % bandwidth per RSS-GEN, Issue 5, clause 6.7:

1. Set RBW to 1 % to 5 % of the actual occupied bandwidth.
2. Set VBW to greater than 3 times the RBW.
3. Set the EMI Receiver to the occupied bandwidth Function set at 99 %
4. Set the peak detector to max hold.
5. Set the sweep time to auto
6. Allow the trace to stabilize.

Please note that this was only used to determine the emission bandwidth and that there are no limits or pass/fail criteria for this test. Please see the data sheets located in Appendix E.

8.8 Variation of the Input Power

The variation of the input power test was performed using the EMI Receiver. The EUT input power was varied between 85 % and 115 % of the nominal rated supply voltage. The carrier frequency was monitored for any change in amplitude.

Test Results:

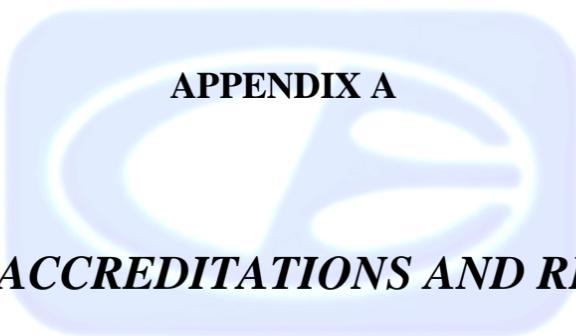
The EUT complies with the relevant requirements of FCC Title 47, Part 15, Subpart A section 15.31 (e); and RSS-247. The variation of the input voltage was varied from 85 % to 115 % and did not change the amplitude nor the frequency of the fundamental emissions.



9. CONCLUSIONS

The Aida Thermostat and Aida Controller, Models: 6700 and 6800 (EUT), as tested, meets all of the specification limits defined in FCC Title 47, Part 15, Subpart B; and Subpart C, sections 15.205, 15.207, 15.209, and 15.247; RSS-GEN and RSS-247.





APPENDIX A

LABORATORY ACCREDITATIONS AND RECOGNITIONS

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

LABORATORY ACCREDITATIONS AND RECOGNITIONS



For US, Canada, Australia/New Zealand, Japan, Taiwan, Korea, and the European Union, Compatible Electronics is currently accredited by NVLAP to ISO/IEC 17025.

For the most up-to-date version of our scopes and certificates please visit

<http://celectronics.com/quality/scope/>

Quote from ISO-ILAC-IAF Communiqué on the Management Systems Requirements of ISO/IEC 17025, General Requirements for the competence of testing and calibration laboratories:

"A laboratory's fulfilment of the requirements of ISO/IEC 17025 means the laboratory meets both the technical competence requirements and management system requirements that are necessary for it to consistently deliver technically valid test results and calibrations. The management system requirements in ISO/IEC 17025 are written in language relevant to laboratory operations and operate generally in accordance with the principles of ISO 9001"

ISED Test Site Registration Number: 2154A



APPENDIX B

MODIFICATIONS TO THE EUT



MODIFICATIONS TO THE EUT

The modifications listed below were made to the EUT to pass FCC Subpart B and FCC 15.247; RSS-GEN and RSS-247 specifications.

All the rework described below was implemented during the test in a method that could be reproduced in all the units by the manufacturer.

No modifications were made to the EUT during the testing.





APPENDIX C

***MODELS COVERED
UNDER THIS REPORT***



MODELS COVERED UNDER THIS REPORT

USED FOR THE PRIMARY TEST

Aida Thermostat and Aida Controller

Models: 6700 and 6800

S/N: N/A

There are no additional models covered under this report.





APPENDIX D

DIAGRAMS AND CHARTS



FIGURE 1: CONDUCTED EMISSIONS TEST SETUP

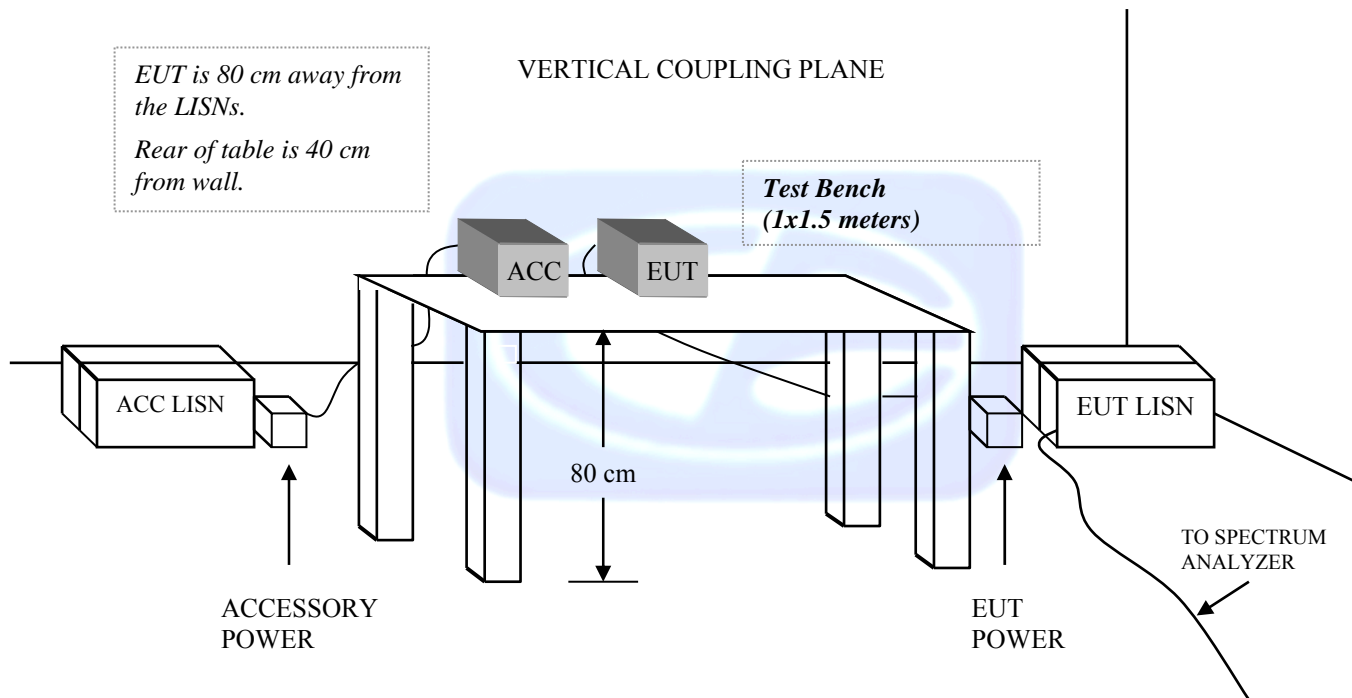
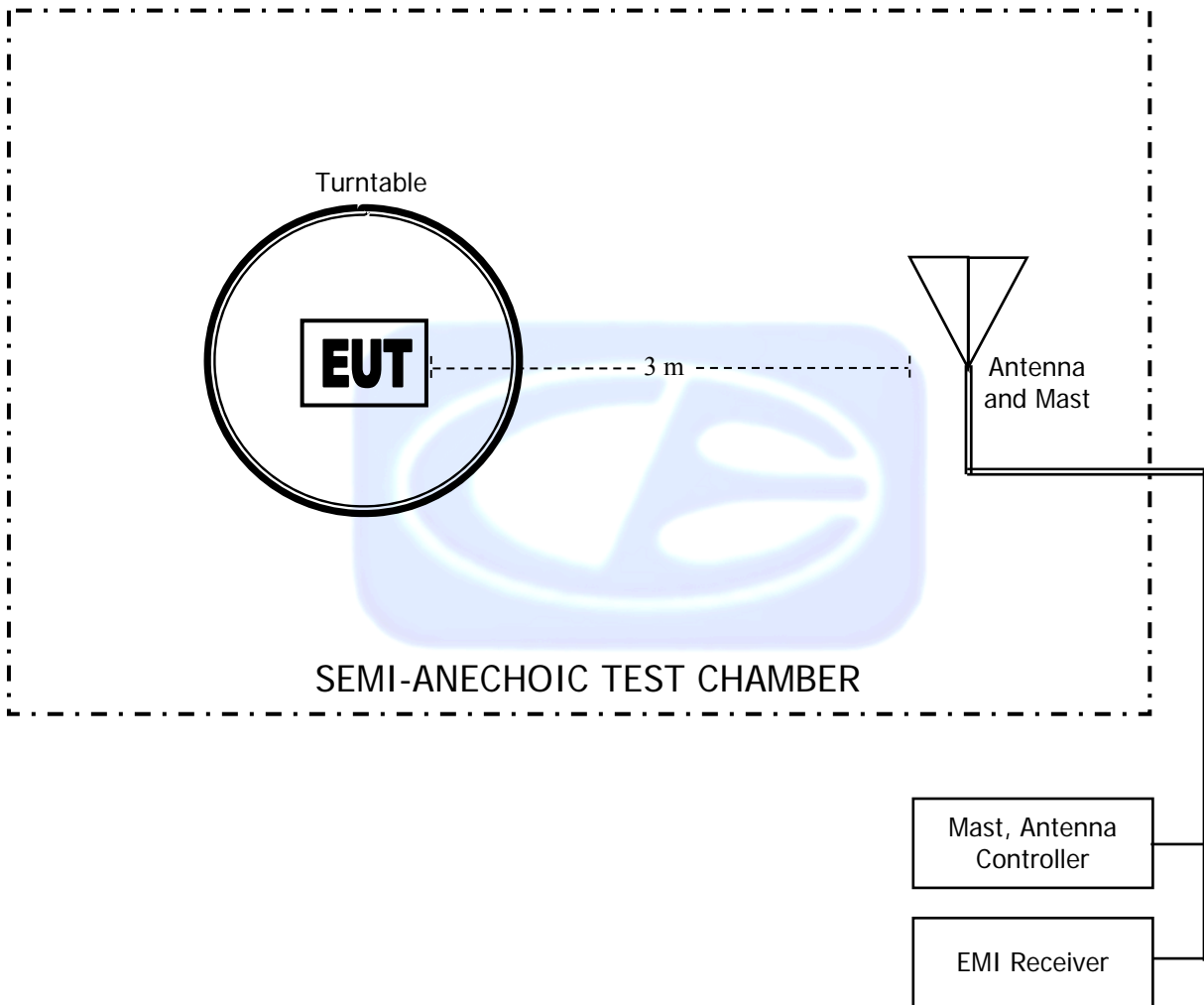




FIGURE 2: LAYOUT OF THE SEMI-ANECHOIC TEST CHAMBER





COM-POWER AL-130R

LOOP ANTENNA

S/N: 121090

CALIBRATION DATE: FEBRUARY 10, 2022

FREQUENCY (MHz)	MAGNETIC (dB/m)	ELECTRIC (dB/m)
0.009	15.6	-35.8
0.01	15.8	-35.6
0.02	14.8	-36.6
0.03	15.6	-35.9
0.04	15.0	-36.5
0.05	14.4	-37.1
0.06	14.6	-36.9
0.07	14.3	-37.2
0.08	14.3	-37.2
0.09	14.4	-37.0
0.10	14.1	-37.4
0.20	14.1	-37.4
0.30	14.0	-37.5
0.40	13.9	-37.6
0.50	14.1	-37.3
0.60	14.1	-37.3
0.70	14.2	-37.3
0.80	14.2	-37.3
0.90	14.2	-37.2
1.00	14.4	-37.0
2.00	14.6	-36.9
3.00	14.6	-36.8
4.00	14.9	-36.6
5.00	14.9	-36.7
6.00	14.8	-36.7
7.00	14.6	-36.8
8.00	14.5	-37.0
9.00	14.3	-37.2
10.00	14.5	-37.0
11.00	14.6	-36.9
12.00	14.7	-36.7
13.00	14.9	-36.6
14.00	15.0	-36.5
15.00	14.9	-36.6
16.00	14.9	-36.6
17.00	14.6	-36.8
18.00	14.4	-37.1
19.00	14.5	-37.0
20.00	14.5	-37.0
21.00	14.2	-37.3
22.00	13.9	-37.5
23.00	13.9	-37.5
24.00	13.8	-37.7
25.00	13.4	-38.0
26.00	13.2	-38.2
27.00	13.2	-38.3
28.00	12.7	-38.7
29.00	12.7	-38.8
30.00	12.4	-39.0



COM-POWER AC-220

COMBILOG ANTENNA

S/N: 61093

CALIBRATION DATE: DECEMBER 14, 2021

FREQUENCY (MHz)	FACTOR (dB)	FREQUENCY (MHz)	FACTOR (dB)
30	22.50	200	16.00
35	21.40	250	17.40
40	21.00	300	19.70
45	20.60	350	20.00
50	19.70	400	22.20
60	16.10	450	22.40
70	12.80	500	23.10
80	12.50	550	23.40
90	14.20	600	24.90
100	15.40	650	25.30
120	16.50	700	25.40
125	16.80	750	26.40
140	15.90	800	26.70
150	16.60	850	27.10
160	18.50	900	27.90
175	15.90	950	28.00
180	15.50	1000	28.00



COM POWER AH-118

HORN ANTENNA

S/N: 10050113

CALIBRATION DATE: DECEMBER 16, 2021

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	23.86	10.0	38.91
1.5	25.67	10.5	39.94
2.0	28.25	11.0	39.10
2.5	29.17	11.5	39.70
3.0	29.78	12.0	40.29
3.5	30.88	12.5	41.93
4.0	31.21	13.0	41.34
4.5	32.96	13.5	40.57
5.0	33.30	14.0	40.23
5.5	34.24	14.5	42.25
6.0	34.57	15.0	43.63
6.5	35.61	15.5	39.96
7.0	36.60	16.0	40.38
7.5	37.49	16.5	40.56
8.0	37.44	17.0	40.93
8.5	37.98	17.5	42.27
9.0	38.01	18.0	43.77
9.5	38.53		



COM-POWER AH-826

HORN ANTENNA

S/N: 71957

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
18.0	33.5	22.5	35.5
18.5	33.5	23.0	35.9
19.0	34.0	23.5	35.7
19.5	34.0	24.0	35.6
20.0	34.3	24.5	36.0
20.5	34.9	25.0	36.2
21.0	34.7	25.5	36.1
21.5	35.0	26.0	36.2
22.0	35.0	26.5	35.7



COM-POWER PAM-118

PREAMPLIFIER

S/N: 181653

CALIBRATION DATE: MARCH 7, 2022

FREQUENCY (GHz)	FACTOR (dB)	FREQUENCY (GHz)	FACTOR (dB)
1.0	40.02	6.0	38.84
1.1	39.72	6.5	39.20
1.2	39.93	7.0	39.46
1.3	39.98	7.5	39.67
1.4	39.99	8.0	39.28
1.5	40.20	8.5	38.63
1.6	40.05	9.0	38.96
1.7	40.15	9.5	39.33
1.8	40.20	10.0	39.58
1.9	40.33	11.0	38.25
2.0	40.33	12.0	40.03
2.5	40.60	13.0	40.55
3.0	40.76	14.0	40.36
3.5	40.87	15.0	39.34
4.0	40.39	16.0	37.34
4.5	39.55	17.0	42.14
5.0	40.34	18.0	42.54
5.5	39.45		



COM-POWER PA-840

MICROWAVE PREAMPLIFIER

S/N: 711013

CALIBRATION DATE: APRIL 8, 2022

FREQUENCY (GHz)	FACTOR (dB)
18.0	24.85
19.0	24.25
20.0	22.69
21.0	22.17
22.0	22.78
23.0	23.23
24.0	23.72
25.0	24.13
26.0	24.28
26.5	25.06



FRONT VIEW

“NO DISPLAY”

TELKONET, INC.
AIDA CONTROLLER
MODEL: 6800

FCC SUBPART B AND C; RSS-GEN and RSS-247 – RADIATED EMISSIONS – BELOW 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



REAR VIEW

“NO DISPLAY”

TELKONET, INC.
AIDA CONTROLLER
MODEL: 6800

FCC SUBPART B AND C; RSS-GEN and RSS-247 – RADIATED EMISSIONS – BELOW 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

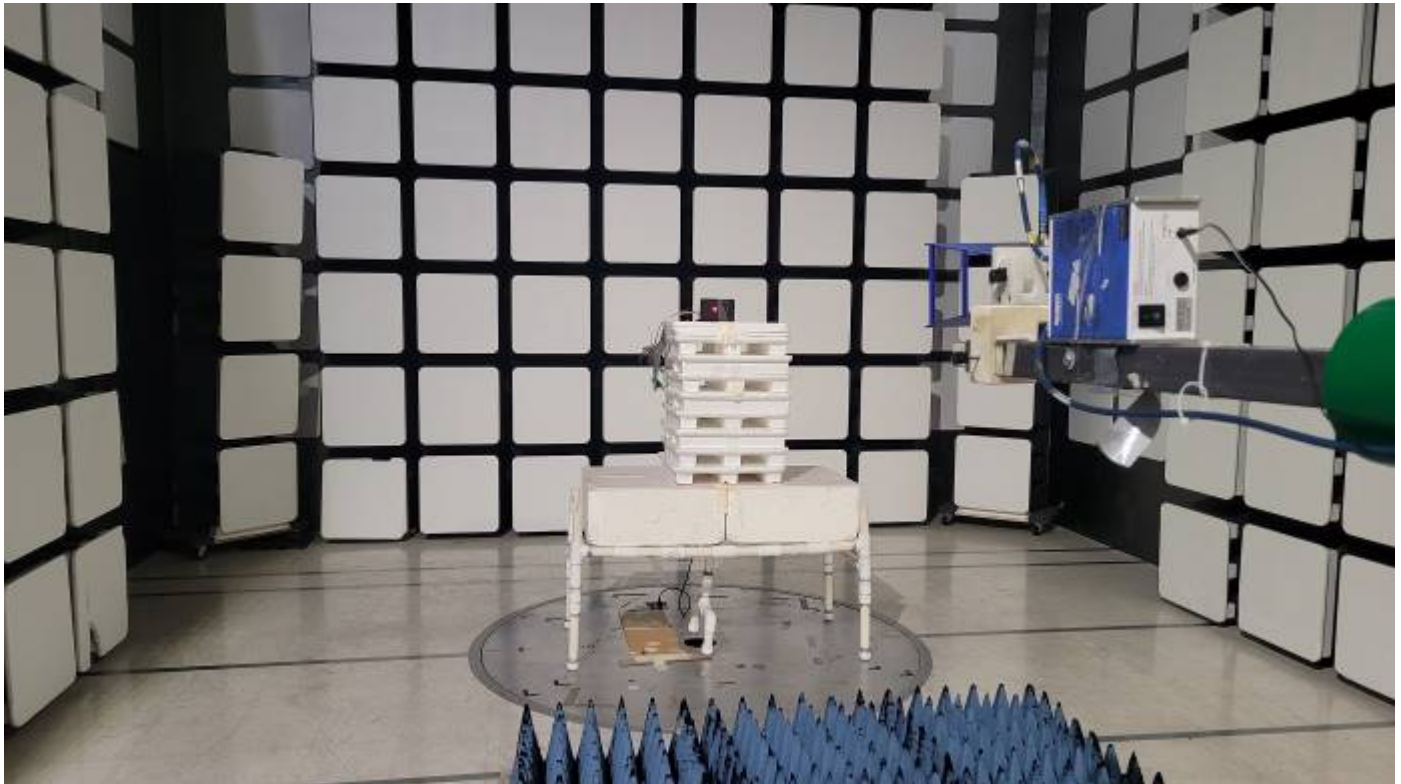


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report
Aida Thermostat and Aida Controller
Models: 6700 and 6800

Report Number: **B30309X1**

Page **D12**



FRONT VIEW

“NO DISPLAY”

TELKONET, INC.
AIDA CONTROLLER
MODEL: 6800

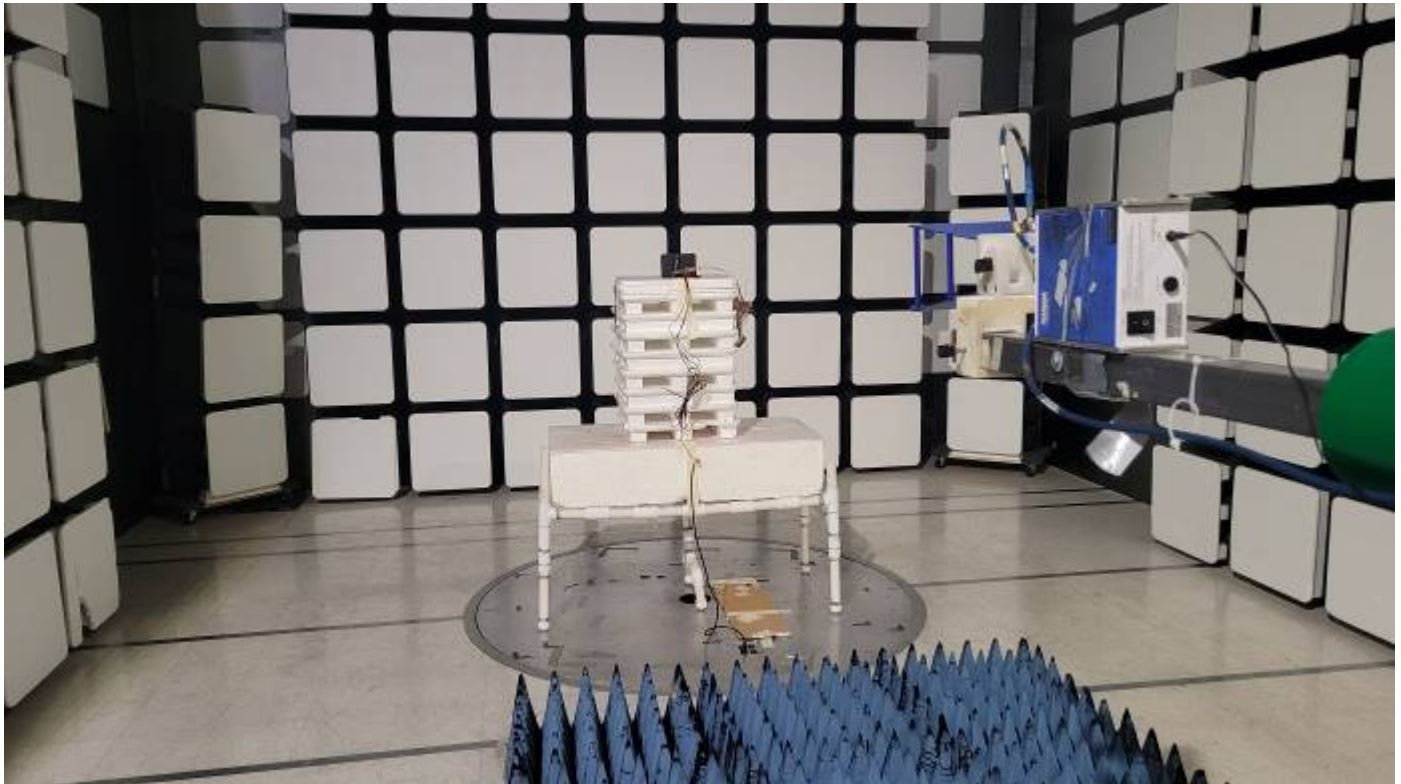
FCC SUBPART B AND C; RSS-GEN and RSS-247 – RADIATED EMISSIONS – ABOVE 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



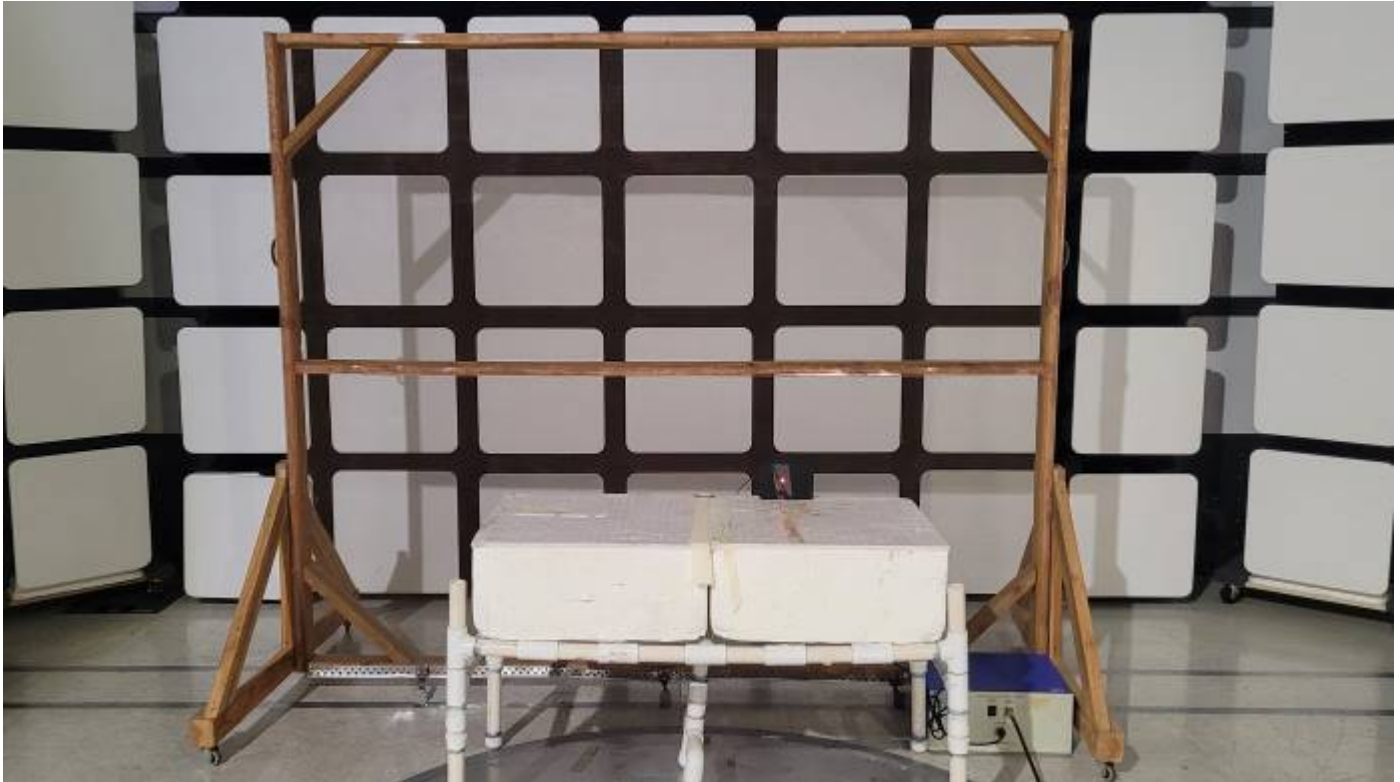
REAR VIEW

“NO DISPLAY”

TELKONET, INC.
AIDA CONTROLLER
MODEL: 6800

FCC SUBPART B AND C; RSS-GEN and RSS-247 – RADIATED EMISSIONS – ABOVE 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



FRONT VIEW

“NO DISPLAY”

TELKONET, INC.
AIDA CONTROLLER
MODEL: 6800

FCC SUBPART B AND C; and RSS-GEN – CONDUCTED EMISSIONS

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



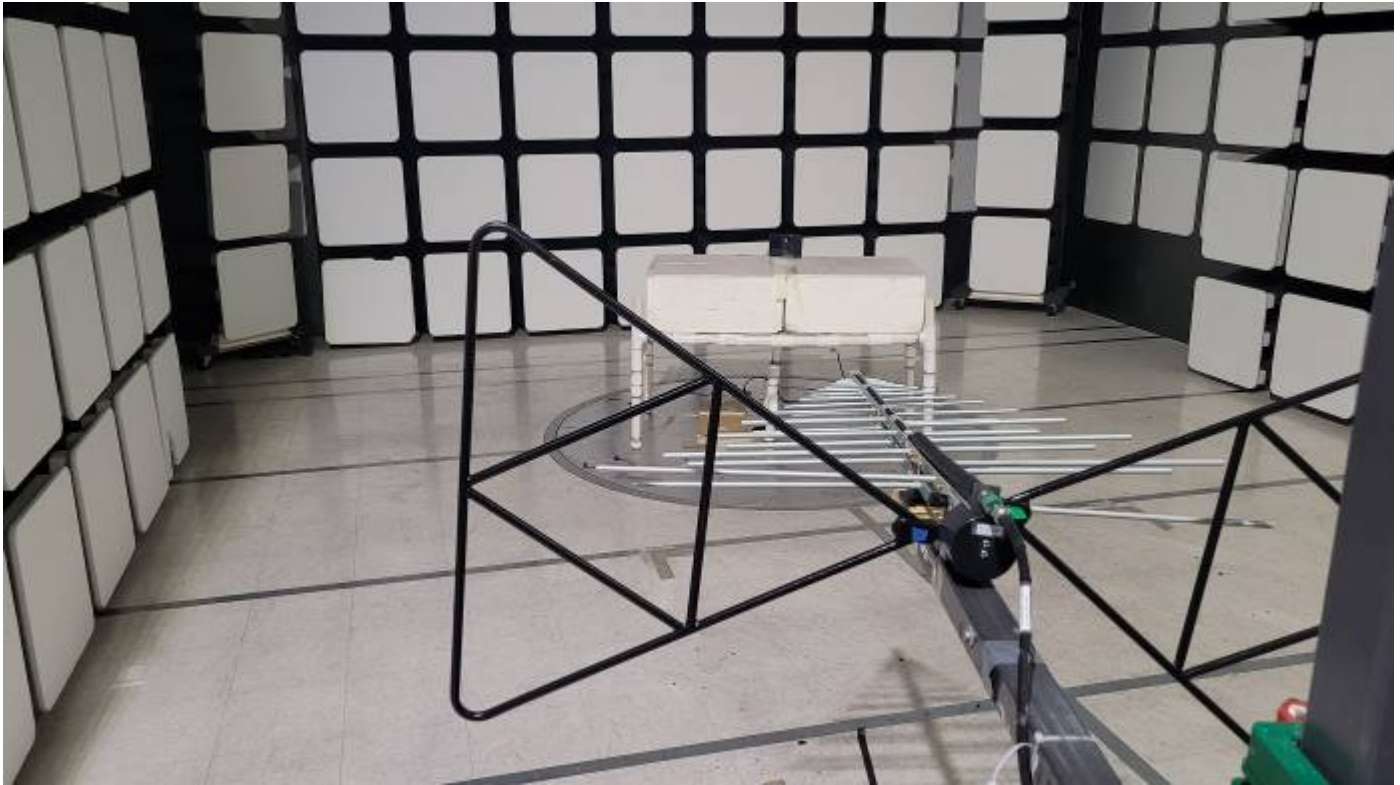
REAR VIEW

“NO DISPLAY”

TELKONET, INC.
AIDA CONTROLLER
MODEL: 6800

FCC SUBPART B AND C; and RSS-GEN – CONDUCTED EMISSIONS

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



FRONT VIEW

“WITH DISPLAY”

TELKONET, INC.
AIDA THERMOSTAT
MODEL: 6700

FCC SUBPART B AND C; RSS-GEN and RSS-247 – RADIATED EMISSIONS – BELOW 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



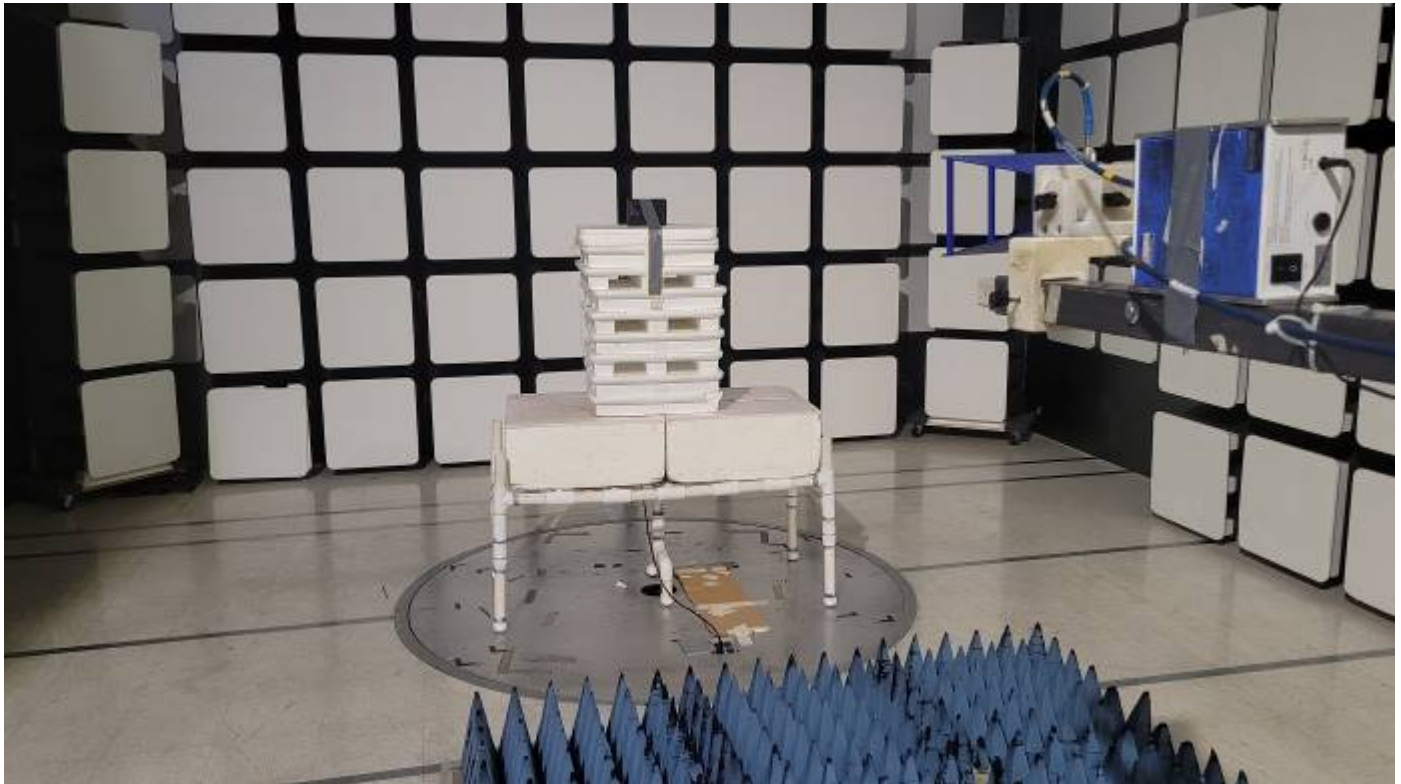
REAR VIEW

“WITH DISPLAY”

TELKONET, INC.
AIDA THERMOSTAT
MODEL: 6700

FCC SUBPART B AND C; RSS-GEN and RSS-247 – RADIATED EMISSIONS – BELOW 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



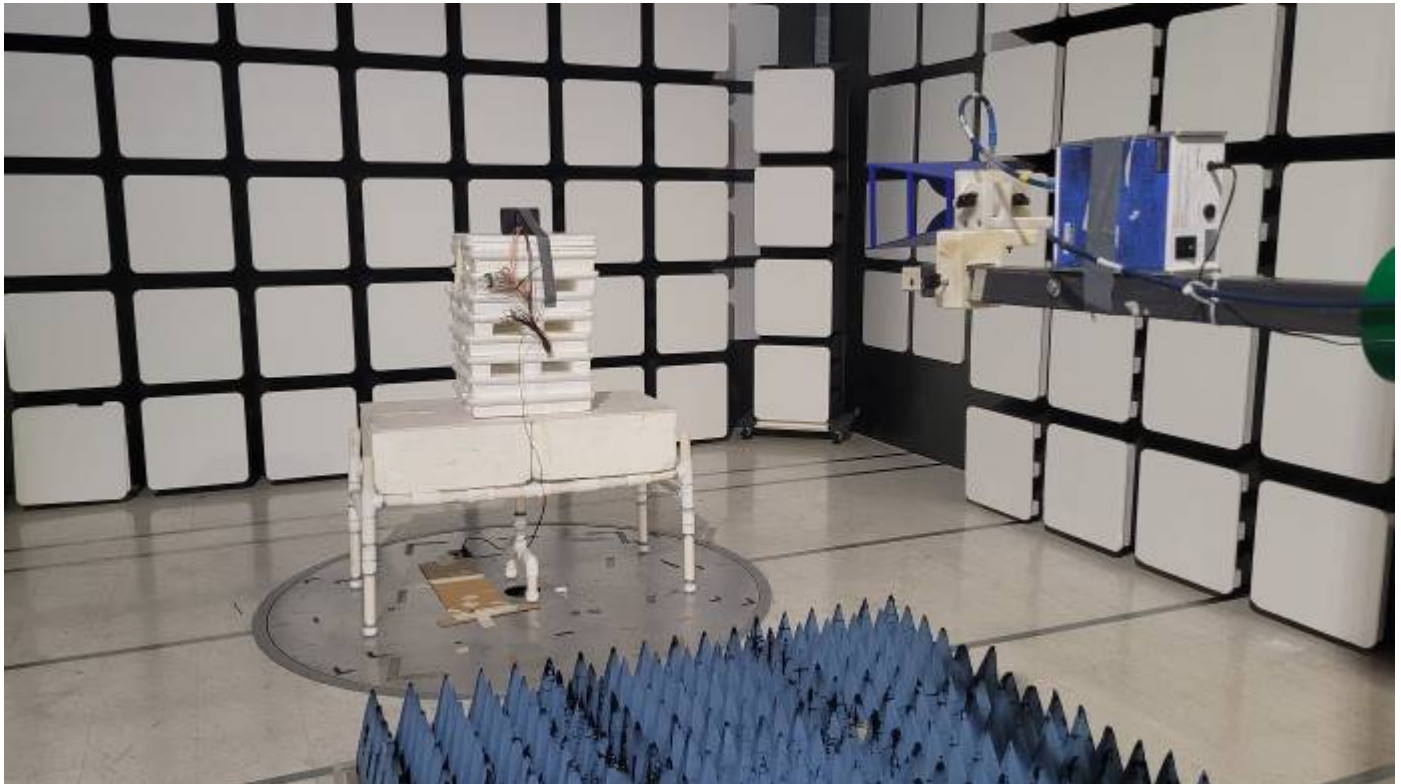
FRONT VIEW

“WITH DISPLAY”

TELKONET, INC.
AIDA THERMOSTAT
MODEL: 6700

FCC SUBPART B AND C; RSS-GEN and RSS-247 – RADIATED EMISSIONS – ABOVE 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



REAR VIEW

“WITH DISPLAY”

TELKONET, INC.
AIDA THERMOSTAT
MODEL: 6700

FCC SUBPART B AND C; RSS-GEN and RSS-247 – RADIATED EMISSIONS – ABOVE 1 GHz

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



FRONT VIEW

“WITH DISPLAY”

TELKONET, INC.
AIDA THERMOSTAT
MODEL: 6700

FCC SUBPART B AND C; and RSS-GEN – CONDUCTED EMISSIONS

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



REAR VIEW

“WITH DISPLAY”

TELKONET, INC.
AIDA THERMOSTAT
MODEL: 6700

FCC SUBPART B AND C; and RSS-GEN – CONDUCTED EMISSIONS

**PHOTOGRAPH SHOWING THE EUT CONFIGURATION
FOR MAXIMUM EMISSIONS**



APPENDIX E

DATA SHEETS



**COMPATIBLE
ELECTRONICS**

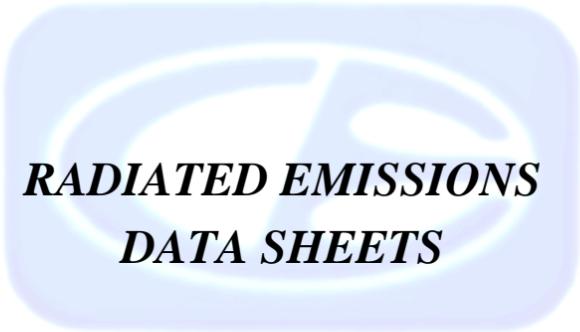
FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

Report Number: **B30309X1**

Page E2



***RADIATED EMISSIONS
DATA SHEETS***

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

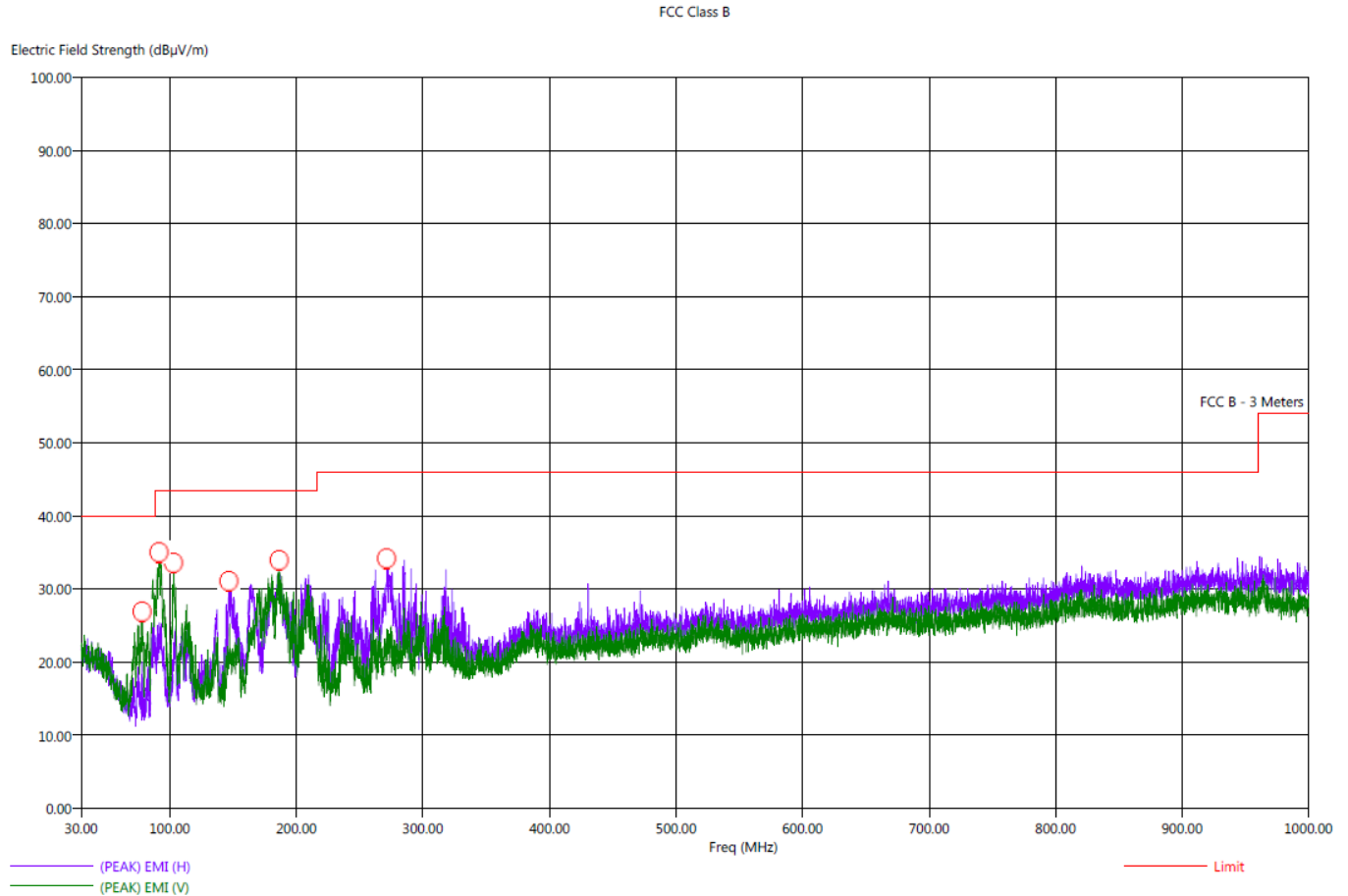
**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

*Aida Thermostat and Aida Controller**Models: 6700 and 6800*

Title: Pre-Scan - FCC Class B
File: 2 - LF - Pre-Scan - No Display - Normal Operation - FCC Class B - 02-17-2023.set
Operator: Kyle Fujimoto
EUT Type: Aida Controller
EUT Condition: The EUT is transmitting Zigbee, BLE, and WiFi at the same time
Company: Telkonet, Inc.
Model: 6800
S/N: N/A
Y-Axis (Worst Case)
No Display

2/23/2023 12:02:26 PM
Sequence: Preliminary Scan



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**
FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report
Aida Thermostat and Aida Controller
Models: 6700 and 6800

Title: Radiated Final - FCC Class B

File: 2 - LF - Final Scan - No Display - Normal Operation - FCC Class B - 02-17-2023.set

Operator: Kyle Fujimoto

EUT Type: Aida Controller

EUT Condition: The EUT is transmitting Zigbee, BLE, and WiFi at the same time

Company: Telkonet, Inc.

Model: 6800

S/N: N/A

Y-Axis

No Display

2/23/2023 12:12:39 PM

Sequence: Final Measurements

FCC Class B

Freq (MHz)	Pol	(PEAK) EMI (dBµV/m)	(QP) EMI (dBµV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBµV/m)	Transducer (dB)	Cable (dB)	Ttbl Aql (deg)	Twr Ht (cm)
78.10	V	31.27	23.12	-8.73	-16.88	40.00	12.31	0.65	111.00	238.55
91.50	V	35.81	31.65	-7.69	-11.85	43.50	14.46	0.67	356.75	143.08
102.90	V	36.22	29.21	-7.28	-14.29	43.50	15.58	0.70	1.75	111.32
146.60	H	34.90	25.75	-8.60	-17.75	43.50	16.19	0.88	8.50	161.89
186.40	V	32.50	28.39	-11.00	-15.11	43.50	15.40	1.02	357.75	127.38
271.30	H	37.81	29.50	-8.19	-16.50	46.00	18.94	1.24	335.25	176.28



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

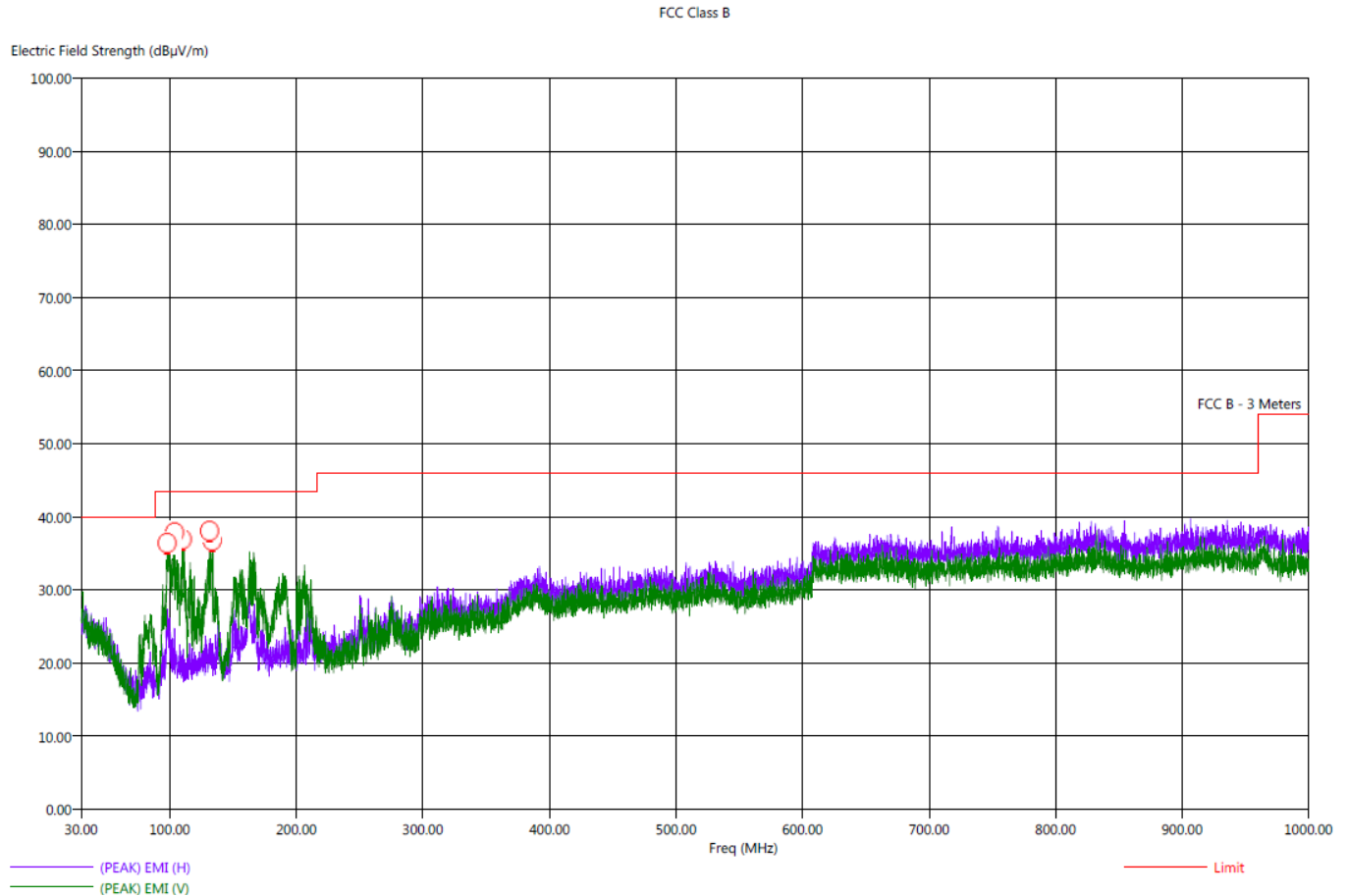
Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



Title: Pre-Scan - FCC Class B
File: 1 - LF - Pre-Scan - With Display - Normal Operation - FCC Class B - 02-17-2023.set
Operator: Kyle Fujimoto
EUT Type: Aida Thermostat
EUT Condition: The EUT is transmitting Zigbee, BLE, and WiFi at the same time
Comments: Model: 6700
S/N: N/A
Y-Axis (Worst Case)
With Display

2/17/2023 8:26:39 AM
Sequence: Preliminary Scan




**COMPATIBLE
ELECTRONICS**
FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report
Aida Thermostat and Aida Controller
Models: 6700 and 6800

Title: Radiated Final - FCC Class B

File: 1 - LF - Final Scan - With Display - Normal Operation - FCC Class B - 02-17-2023.set

Operator: Kyle Fujimoto

EUT Type: Aida Thermostat

EUT Condition: The EUT is transmitting Zigbee, BLE, and WiFi at the same time

Company: Telkonet, Inc.

Model: 6700

S/N: N/A

With Display

Y-Axis

2/17/2023 8:35:00 AM
Sequence: Final Measurements

FCC Class B

Freq (MHz)	Pol	(PEAK) EMI (dBμV/m)	(QP) EMI (dBμV/m)	(PEAK) Margin (dB)	(QP) Margin (dB)	Limit (dBμV/m)	Transducer (dB)	Cable (dB)	Ttbl Agl (deg)	Twr Ht (cm)
97.80	V	38.97	33.75	-4.53	-9.75	43.50	15.19	0.68	225.75	127.08
99.60	V	37.74	33.39	-5.76	-10.11	43.50	15.39	0.68	230.75	127.26
103.80	V	39.28	31.49	-4.22	-12.01	43.50	15.60	0.70	222.75	159.14
109.90	V	36.21	27.80	-7.29	-15.70	43.50	15.80	0.74	49.25	190.73
131.30	V	37.82	30.76	-5.68	-12.74	43.50	16.60	0.84	351.25	143.02
133.50	V	35.12	28.97	-8.38	-14.53	43.50	16.45	0.84	9.00	111.44


**Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500**
**Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400**
**Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044**



***TRANSMITTER HARMONICS
DATA SHEETS***


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247
 Telkonet, Inc.
 Aida Controller
 Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - No Display - Low Channel
 Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	51.12	V	73.97	-22.85	Peak	12.00	159.56	
4810.00	44.12	V	53.97	-9.85	Avg	12.00	159.56	
7215.00								Not in Restricted Band
7215.00								Done via Conducted
9620.00								Not in Restricted Band
9620.00								Done via Conducted
12025.00	47.02	V	73.97	-26.95	Peak	315.25	241.25	
12025.00	35.99	V	53.97	-17.98	Avg	315.25	241.25	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected

 Brea Division
 114 Olinda Drive
 Brea, CA 92823
 (714) 579-0500

 Lake Forest Division
 20621 Pascal Way
 Lake Forest, CA 92630
 (949) 587-0400

 Newbury Park Division
 1050 Lawrence Drive
 Newbury Park, CA 91320
 (805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Controller

Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics - No Display - Low Channel**Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	48.86	V	73.97	-25.11	Peak	251.25	102.40	
4810.00	31.69	V	53.97	-22.28	Avg	251.25	102.24	
7215.00								Not in Restricted Band
7215.00								Done via Conducted
9620.00								Not in Restricted Band
9620.00								Done via Conducted
12025.00	45.98	V	73.97	-27.99	Peak	115.50	248.26	
12025.00	34.68	V	53.97	-19.29	Avg	115.50	248.26	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Controller

Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics - No Display - Low Channel**Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	50.06	V	73.97	-23.91	Peak	117.00	155.24	
4810.00	44.11	V	53.97	-9.86	Avg	117.00	155.24	
7215.00								Not in Restricted Band
7215.00								Done via Conducted
9620.00								Not in Restricted Band
9620.00								Done via Conducted
12025.00	46.99	V	73.97	-26.98	Peak	124.25	235.25	
12025.00	36.15	V	53.97	-17.82	Avg	124.25	235.25	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Controller

Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics - No Display - Low Channel**Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	48.21	H	73.97	-25.76	Peak	248.00	102.25	
4810.00	41.26	H	53.97	-12.71	Avg	248.00	102.25	
7215.00								Not in Restricted Band
7215.00								Done via Conducted
9620.00								Not in Restricted Band
9620.00								Done via Conducted
12025.00	46.26	H	73.97	-27.71	Peak	281.25	181.25	
12025.00	34.25	H	53.97	-19.72	Avg	281.25	181.25	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

**FCC 15.247 and RSS-247**

Telkonet, Inc.
Aida Controller
Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - No Display - Low Channel
Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	51.02	H	73.97	-22.95	Peak	83.00	174.26	
4810.00	45.48	H	53.97	-8.49	Avg	83.00	174.26	
7215.00								Not in Restricted Band
7215.00								Done via Conducted
9620.00								Not in Restricted Band
9620.00								Done via Conducted
12025.00	45.59	H	73.97	-28.38	Peak	92.25	112.26	
12025.00	34.01	H	53.97	-19.96	Avg	92.25	112.26	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Controller

Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics - No Display - Low Channel**Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	53.02	H	73.97	-20.95	Peak	226.00	128.25	
4810.00	47.51	H	53.97	-6.46	Avg	226.00	128.25	
7215.00								Not in Restricted Band
7215.00								Done via Conducted
9620.00								Not in Restricted Band
9620.00								Done via Conducted
12025.00	46.86	H	73.97	-27.11	Peak	12.75	248.26	
12025.00	35.26	H	53.97	-18.71	Avg	12.75	248.26	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Controller

Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics - No Display - Middle Channel

Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	50.46	V	73.97	-23.51	Peak	55.25	176.29	
4880.00	44.29	V	53.97	-9.68	Avg	55.25	176.29	
7320.00	44.26	V	73.97	-29.71	Peak	1.25	226.25	
7320.00	32.58	V	53.97	-21.39	Avg	1.25	226.25	
9760.00								Not in Restricted Band Done via Conducted
9760.00								
12200.00	46.52	V	73.97	-27.45	Peak	182.75	157.25	
12200.00	34.59	V	53.97	-19.38	Avg	182.75	157.25	
14640.00								No Emission Detected
14640.00								
17080.00								No Emission Detected
17080.00								
19520.00								No Emission Detected
19520.00								
21960.00								No Emission Detected
21960.00								
24400.00								No Emission Detected
24400.00								

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247
 Telkonet, Inc.
 Aida Controller
 Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - No Display - Middle Channel
 Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	49.52	V	73.97	-24.45	Peak	112.26	110.25	
4880.00	42.26	V	53.97	-11.71	Avg	112.26	110.25	
7320.00	45.28	V	73.97	-28.69	Peak	97.50	126.25	
7320.00	34.26	V	53.97	-19.71	Avg	97.50	126.25	
9760.00								Not in Restricted Band Done via Conducted
9760.00								
12200.00	45.48	V	73.97	-28.49	Peak	221.25	142.25	
12200.00	34.26	V	53.97	-19.71	Avg	221.25	142.25	
14640.00								No Emission Detected
14640.00								
17080.00								No Emission Detected
17080.00								
19520.00								No Emission Detected
19520.00								
21960.00								No Emission Detected
21960.00								
24400.00								No Emission Detected
24400.00								

 Brea Division
 114 Olinda Drive
 Brea, CA 92823
 (714) 579-0500

 Lake Forest Division
 20621 Pascal Way
 Lake Forest, CA 92630
 (949) 587-0400

 Newbury Park Division
 1050 Lawrence Drive
 Newbury Park, CA 91320
 (805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247
 Telkonet, Inc.
 Aida Controller
 Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - No Display - Middle Channel
 Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	51.99	V	73.97	-21.98	Peak	115.00	124.25	
4880.00	44.25	V	53.97	-9.72	Avg	115.00	124.25	
7320.00	42.26	V	73.97	-31.71	Peak	241.00	220.25	
7320.00	31.25	V	53.97	-22.72	Avg	241.00	220.25	
9760.00								Not in Restricted Band Done via Conducted
9760.00								
12200.00	46.25	V	73.97	-27.72	Peak	45.25	185.50	
12200.00	34.27	V	53.97	-19.70	Avg	45.25	185.50	
14640.00								No Emission Detected
14640.00								
17080.00								No Emission Detected
17080.00								
19520.00								No Emission Detected
19520.00								
21960.00								No Emission Detected
21960.00								
24400.00								No Emission Detected
24400.00								

 Brea Division
 114 Olinda Drive
 Brea, CA 92823
 (714) 579-0500

 Lake Forest Division
 20621 Pascal Way
 Lake Forest, CA 92630
 (949) 587-0400

 Newbury Park Division
 1050 Lawrence Drive
 Newbury Park, CA 91320
 (805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247
 Telkonet, Inc.
 Aida Controller
 Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - No Display - Middle Channel
 Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	46.26	H	73.97	-27.71	Peak	251.25	105.25	
4880.00	40.25	H	53.97	-13.72	Avg	251.25	105.25	
7320.00	43.25	H	73.97	-30.72	Peak	1.50	125.26	
7320.00	31.26	H	53.97	-22.71	Avg	1.50	125.26	
9760.00								Not in Restricted Band Done via Conducted
9760.00								
12200.00	46.56	H	73.97	-27.41	Peak	336.25	101.25	
12200.00	35.21	H	53.97	-18.76	Avg	336.25	101.25	
14640.00								No Emission Detected
14640.00								
17080.00								No Emission Detected
17080.00								
19520.00								No Emission Detected
19520.00								
21960.00								No Emission Detected
21960.00								
24400.00								No Emission Detected
24400.00								

 Brea Division
 114 Olinda Drive
 Brea, CA 92823
 (714) 579-0500

 Lake Forest Division
 20621 Pascal Way
 Lake Forest, CA 92630
 (949) 587-0400

 Newbury Park Division
 1050 Lawrence Drive
 Newbury Park, CA 91320
 (805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Controller

Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics - No Display - Middle Channel**Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	52.26	H	73.97	-21.71	Peak	78.00	142.25	
4880.00	46.25	H	53.97	-7.72	Avg	78.00	142.25	
7320.00	41.26	H	73.97	-32.71	Peak	102.26	143.25	
7320.00	30.85	H	53.97	-23.12	Avg	102.26	143.25	
9760.00								Not in Restricted Band Done via Conducted
9760.00								
12200.00	46.26	H	73.97	-27.71	Peak	158.25	142.25	
12200.00	35.36	H	53.97	-18.61	Avg	158.25	142.25	
14640.00								No Emission Detected
14640.00								
17080.00								No Emission Detected
17080.00								
19520.00								No Emission Detected
19520.00								
21960.00								No Emission Detected
21960.00								
24400.00								No Emission Detected
24400.00								

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

**FCC 15.247 and RSS-247**

Telkonet, Inc.
Aida Controller
Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics - No Display - Middle Channel
Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	51.26	H	73.97	-22.71	Peak	115.25	142.26	
4880.00	45.25	H	53.97	-8.72	Avg	115.25	142.26	
7320.00	43.59	H	73.97	-30.38	Peak	125.00	175.25	
7320.00	30.26	H	53.97	-23.71	Avg	125.00	175.25	
9760.00								Not in Restricted Band Done via Conducted
9760.00								
12200.00	46.28	H	73.97	-27.69	Peak	281.25	241.25	
12200.00	34.26	H	53.97	-19.71	Avg	281.25	241.25	
14640.00								No Emission Detected
14640.00								
17080.00								No Emission Detected
17080.00								
19520.00								No Emission Detected
19520.00								
21960.00								No Emission Detected
21960.00								
24400.00								No Emission Detected
24400.00								



FCC 15.247 and RSS-247

Telkonet, Inc.
Aida Controller
Model: 6800

Date: 02/23/2023
Lab: D
Tested By: Kyle Fujimoto

**Harmonics - No Display - High Channel
Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	52.82	V	73.97	-21.15	Peak	239.75	175.08	
4960.00	47.27	V	53.97	-6.70	Avg	239.75	175.08	
7440.00	43.85	V	73.97	-30.12	Peak	19.00	111.32	
7440.00	32.10	V	53.97	-21.87	Avg	19.00	111.32	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	48.26	V	73.97	-25.71	Peak	221.00	191.14	
12400.00	35.26	V	53.97	-18.71	Avg	221.00	191.14	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected



FCC 15.247 and RSS-247

Telkonet, Inc.
Aida Controller
Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - No Display - High Channel
Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	50.34	V	73.97	-23.63	Peak	124.50	191.20	
4960.00	44.05	V	53.97	-9.92	Avg	124.50	191.20	
7440.00	46.46	V	73.97	-27.51	Peak	302.50	143.26	
7440.00	35.03	V	53.97	-18.94	Avg	302.50	143.26	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.21	V	73.97	-23.76	Peak	302.50	175.20	
12400.00	40.25	V	53.97	-13.72	Avg	302.50	175.20	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

**FCC 15.247 and RSS-247**

Telkonet, Inc.
Aida Controller
Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - No Display - High Channel
Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	50.23	V	73.97	-23.74	Peak	332.00	111.44	
4960.00	43.98	V	53.97	-9.99	Avg	332.00	111.44	
7440.00	44.42	V	73.97	-29.55	Peak	187.25	159.08	
7440.00	32.18	V	53.97	-21.79	Avg	187.25	159.00	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.14	V	73.97	-23.83	Peak	342.25	111.44	
12400.00	36.95	V	53.97	-17.02	Avg	342.25	111.44	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected



FCC 15.247 and RSS-247

Telkonet, Inc.
Aida Controller
Model: 6800

Date: 02/23/2023
Lab: D
Tested By: Kyle Fujimoto

**Harmonics - No Display - High Channel
Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	50.23	H	73.97	-23.74	Peak	332.00	111.44	
4960.00	43.99	H	53.97	-9.98	Avg	332.00	111.44	
7440.00	44.42	H	73.97	-29.55	Peak	187.25	159.08	
7440.00	32.18	H	53.97	-21.79	Avg	187.25	159.08	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.26	H	73.97	-23.71	Peak	221.00	191.14	
12400.00	36.29	H	53.97	-17.68	Avg	221.00	191.14	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

**FCC 15.247 and RSS-247**

Telkonet, Inc.
Aida Controller
Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - No Display - High Channel
Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	54.42	H	73.97	-19.55	Peak	278.50	175.20	
4960.00	49.29	H	53.97	-4.68	Avg	278.50	175.20	
7440.00	44.95	H	73.97	-29.02	Peak	309.00	127.20	
7440.00	33.17	H	53.97	-20.80	Avg	309.00	127.20	
9920.00								Not in Restricted Band Done via Conducted
9920.00								
12400.00	49.68	H	73.97	-24.29	Peak	6.75	191.26	
12400.00	38.76	H	53.97	-15.21	Avg	6.75	191.26	
14880.00								No Emission Detected
14880.00								
17360.00								No Emission Detected
17360.00								
19840.00								No Emission Detected
19840.00								
22320.00								No Emission Detected
22320.00								
24800.00								No Emission Detected
24800.00								

**FCC 15.247 and RSS-247**

Telkonet, Inc.
Aida Controller
Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - No Display - High Channel
Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	53.10	H	73.97	-20.87	Peak	305.75	175.14	
4960.00	47.25	H	53.97	-6.72	Avg	305.75	175.14	
7440.00	46.08	H	73.97	-27.89	Peak	280.25	111.20	
7440.00	35.08	H	53.97	-18.89	Avg	280.25	111.20	
9920.00								Not in Restricted Band Done via Conducted
9920.00								
12400.00	50.65	H	73.97	-23.32	Peak	62.25	143.38	
12400.00	36.71	H	53.97	-17.26	Avg	62.25	143.38	
14880.00								No Emission Detected
14880.00								
17360.00								No Emission Detected
17360.00								
19840.00								No Emission Detected
19840.00								
22320.00								No Emission Detected
22320.00								
24800.00								No Emission Detected
24800.00								



FCC 15.247 and RSS-247

Telkonet, Inc.
Aida Controller
Model: 6800

Date: 02/23/2023

Lab: D

Tested By: Kyle Fujimoto

Non Harmonic Emissions from the Tx and Digital Portion - 9 kHz to 30 MHz

Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 25 GHz

[illegible]


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics with Display - Low Channel

Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	51.64	V	73.97	-22.33	Peak	44.00	158.25	
4810.00	45.53	V	53.97	-8.44	Avg	44.00	158.25	
7215.00								Not in Restricted Band
7215.00								Done via Conducted
9620.00								Not in Restricted Band
9620.00								Done via Conducted
12025.00	47.21	V	73.97	-26.76	Peak	316.25	239.32	
12025.00	35.16	V	53.97	-18.81	Avg	316.25	239.32	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics with Display - Low Channel**Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	49.12	V	73.97	-24.85	Peak	250.25	111.50	
4810.00	32.02	V	53.97	-21.95	Avg	250.25	111.50	
7215.00								Not in Restricted Band
7215.00								Done via Conducted
9620.00								Not in Restricted Band
9620.00								Done via Conducted
12025.00	46.47	V	73.97	-27.50	Peak	109.25	249.01	
12025.00	35.23	V	53.97	-18.74	Avg	109.25	249.01	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics with Display - Low Channel

Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	50.68	V	73.97	-23.29	Peak	115.00	159.14	
4810.00	44.69	V	53.97	-9.28	Avg	115.00	159.14	
7215.00								Not in Restricted Band
7215.00								Done via Conducted
9620.00								Not in Restricted Band
9620.00								Done via Conducted
12025.00	47.44	V	73.97	-26.53	Peak	126.75	239.14	
12025.00	35.14	V	53.97	-18.83	Avg	126.75	239.14	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected

**FCC 15.247 and RSS-247**

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics with Display - Low Channel**Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	48.92	H	73.97	-25.05	Peak	250.00	111.26	
4810.00	42.68	H	53.97	-11.29	Avg	250.00	111.26	
7215.00								Not in Restricted Band
7215.00								Done via Conducted
9620.00								Not in Restricted Band
9620.00								Done via Conducted
12025.00	47.43	H	73.97	-26.54	Peak	283.75	191.44	
12025.00	35.23	H	53.97	-18.74	Avg	283.75	191.44	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics with Display - Low Channel**Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	52.88	H	73.97	-21.09	Peak	84.00	175.32	
4810.00	46.79	H	53.97	-7.18	Avg	84.00	175.32	
7215.00								Not in Restricted Band
7215.00								Done via Conducted
9620.00								Not in Restricted Band
9620.00								Done via Conducted
12025.00	46.59	H	73.97	-27.38	Peak	93.75	111.38	
12025.00	35.05	H	53.97	-18.92	Avg	93.75	111.38	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics with Display - Low Channel**Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4810.00	53.19	H	73.97	-20.78	Peak	219.00	127.20	
4810.00	47.67	H	53.97	-6.30	Avg	219.00	127.20	
7215.00								Not in Restricted Band
7215.00								Done via Conducted
9620.00								Not in Restricted Band
9620.00								Done via Conducted
12025.00	47.08	H	73.97	-26.89	Peak	4.75	249.95	
12025.00	35.46	H	53.97	-18.51	Avg	4.75	249.95	
14430.00								No Emission
14430.00								Detected
16835.00								No Emission
16835.00								Detected
19240.00								No Emission
19240.00								Detected
21645.00								No Emission
21645.00								Detected
24050.00								No Emission
24050.00								Detected

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics with Display - Middle Channel**Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	51.47	V	73.97	-22.50	Peak	54.75	175.14	
4880.00	45.20	V	53.97	-8.77	Avg	54.75	175.14	
7320.00	45.82	V	73.97	-28.15	Peak	359.25	223.08	
7320.00	33.81	V	53.97	-20.16	Avg	359.25	223.08	
9760.00								Not in Restricted Band Done via Conducted
9760.00								
12200.00	46.90	V	73.97	-27.07	Peak	183.75	158.97	
12200.00	35.30	V	53.97	-18.67	Avg	183.75	158.97	
14640.00								No Emission Detected
14640.00								
17080.00								No Emission Detected
17080.00								
19520.00								No Emission Detected
19520.00								
21960.00								No Emission Detected
21960.00								
24400.00								No Emission Detected
24400.00								

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics with Display - Middle Channel**Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	49.83	V	73.97	-24.14	Peak	113.25	111.32	
4880.00	43.47	V	53.97	-10.50	Avg	113.25	111.32	
7320.00	46.27	V	73.97	-27.70	Peak	98.50	127.44	
7320.00	35.45	V	53.97	-18.52	Avg	98.50	127.44	
9760.00								Not in Restricted Band Done via Conducted
9760.00								
12200.00	46.88	V	73.97	-27.09	Peak	222.75	143.32	
12200.00	35.14	V	53.97	-18.83	Avg	222.75	143.32	
14640.00								No Emission Detected
14640.00								
17080.00								No Emission Detected
17080.00								
19520.00								No Emission Detected
19520.00								
21960.00								No Emission Detected
21960.00								
24400.00								No Emission Detected
24400.00								

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics with Display - Middle Channel**Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	52.05	V	73.97	-21.92	Peak	118.00	127.26	
4880.00	46.18	V	53.97	-7.79	Avg	118.00	127.26	
7320.00	45.67	V	73.97	-28.30	Peak	243.00	223.20	
7320.00	33.72	V	53.97	-20.25	Avg	243.00	223.20	
9760.00								Not in Restricted Band Done via Conducted
9760.00								
12200.00	47.41	V	73.97	-26.56	Peak	48.25	207.50	
12200.00	35.14	V	53.97	-18.83	Avg	48.25	207.50	
14640.00								No Emission Detected
14640.00								
17080.00								No Emission Detected
17080.00								
19520.00								No Emission Detected
19520.00								
21960.00								No Emission Detected
21960.00								
24400.00								No Emission Detected
24400.00								

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics with Display - Middle Channel

Transmit Mode - X-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	49.12	H	73.97	-24.85	Peak	253.75	111.08	
4880.00	42.97	H	53.97	-11.00	Avg	253.75	111.08	
7320.00	44.16	H	73.97	-29.81	Peak	0.50	127.26	
7320.00	32.50	H	53.97	-21.47	Avg	0.50	127.26	
9760.00								Not in Restricted Band
9760.00								Done via Conducted
12200.00	47.10	H	73.97	-26.87	Peak	337.25	127.44	
12200.00	35.60	H	53.97	-18.37	Avg	337.25	127.44	
14640.00								No Emission
14640.00								Detected
17080.00								No Emission
17080.00								Detected
19520.00								No Emission
19520.00								Detected
21960.00								No Emission
21960.00								Detected
24400.00								No Emission
24400.00								Detected

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics with Display - Middle Channel**Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	54.36	H	73.97	-19.61	Peak	98.00	143.20	
4880.00	48.60	H	53.97	-5.37	Avg	98.00	143.20	
7320.00	43.49	H	73.97	-30.48	Peak	101.25	144.70	
7320.00	31.96	H	53.97	-22.01	Avg	101.25	144.70	
9760.00								Not in Restricted Band Done via Conducted
9760.00								
12200.00	47.28	H	73.97	-26.69	Peak	159.75	143.26	
12200.00	35.36	H	53.97	-18.61	Avg	159.75	143.26	
14640.00								No Emission Detected
14640.00								
17080.00								No Emission Detected
17080.00								
19520.00								No Emission Detected
19520.00								
21960.00								No Emission Detected
21960.00								
24400.00								No Emission Detected
24400.00								

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics with Display - Middle Channel

Transmit Mode - Z-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4880.00	52.96	H	73.97	-21.01	Peak	205.25	143.32	
4880.00	46.67	H	53.97	-7.30	Avg	205.25	143.32	
7320.00	45.79	H	73.97	-28.18	Peak	127.00	175.38	
7320.00	32.09	H	53.97	-21.88	Avg	127.00	175.38	
9760.00								Not in Restricted Band Done via Conducted
9760.00								
12200.00	47.18	H	73.97	-26.79	Peak	282.75	239.26	
12200.00	35.52	H	53.97	-18.45	Avg	282.75	239.26	
14640.00								No Emission Detected
14640.00								
17080.00								No Emission Detected
17080.00								
19520.00								No Emission Detected
19520.00								
21960.00								No Emission Detected
21960.00								
24400.00								No Emission Detected
24400.00								

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics - With Display - High Channel**Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	50.64	V	73.97	-23.33	Peak	59.00	223.14	
4960.00	44.81	V	53.97	-9.16	Avg	59.00	223.14	
7440.00	45.87	V	73.97	-28.10	Peak	358.25	207.08	
7440.00	32.12	V	53.97	-21.85	Avg	358.25	207.08	
9920.00								Not in Restricted Band Done via Conducted
9920.00								
12400.00	49.48	V	73.97	-24.49	Peak	302.75	207.20	
12400.00	36.21	V	53.97	-17.76	Avg	302.72	207.20	
14880.00								No Emission Detected
14880.00								
17360.00								No Emission Detected
17360.00								
19840.00								No Emission Detected
19840.00								
22320.00								No Emission Detected
22320.00								
24800.00								No Emission Detected
24800.00								

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics - With Display - High Channel

Transmit Mode - Y-Axis

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	48.31	V	73.97	-25.66	Peak	296.25	143.62	
4960.00	36.18	V	53.97	-17.79	Avg	296.25	143.62	
7440.00	45.26	V	73.97	-28.71	Peak	100.50	191.74	
7440.00	33.87	V	53.97	-20.10	Avg	100.50	191.74	
9920.00								Not in Restricted Band Done via Conducted
9920.00								
12400.00	48.33	V	73.97	-25.64	Peak	314.25	126.79	
12400.00	36.70	V	53.97	-17.27	Avg	314.25	126.79	
14880.00								No Emission Detected
14880.00								
17360.00								No Emission Detected
17360.00								
19840.00								No Emission Detected
19840.00								
22320.00								No Emission Detected
22320.00								
24800.00								No Emission Detected
24800.00								


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - With Display - High Channel
Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	51.71	V	73.97	-22.26	Peak	232.00	127.08	
4960.00	45.69	V	53.97	-8.28	Avg	232.00	127.08	
7440.00	45.03	V	73.97	-28.94	Peak	103.00	207.02	
7440.00	33.47	V	53.97	-20.50	Avg	103.00	207.02	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.12	V	73.97	-23.85	Peak	148.75	127.14	
12400.00	36.18	V	53.97	-17.79	Avg	148.75	127.14	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - With Display - High Channel
Transmit Mode - X-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	48.32	H	73.97	-25.65	Peak	105.00	143.44	
4960.00	28.32	H	53.97	-25.65	Avg	105.00	143.44	
7440.00	45.03	H	73.97	-28.94	Peak	158.75	159.80	
7440.00	31.99	H	53.97	-21.98	Avg	158.75	159.80	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.24	H	73.97	-23.73	Peak	174.25	111.44	
12400.00	37.79	H	53.97	-16.18	Avg	174.25	111.44	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



FCC 15.247 and RSS-247

Telkonet, Inc.
Aida Thermostat
Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

**Harmonics - With Display - High Channel
Transmit Mode - Y-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	53.92	H	73.97	-20.05	Peak	104.00	159.44	
4960.00	48.36	H	53.97	-5.61	Avg	104.00	159.44	
7440.00	43.74	H	73.97	-30.23	Peak	295.50	159.32	
7440.00	32.09	H	53.97	-21.88	Avg	295.50	159.32	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	49.50	H	73.97	-24.47	Peak	154.25	127.74	
12400.00	37.74	H	53.97	-16.23	Avg	154.25	127.74	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

FCC 15.247 and RSS-247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/15/2023

Lab: D

Tested By: Kyle Fujimoto

Harmonics - With Display - High Channel**Transmit Mode - Z-Axis**

Freq. (MHz)	Level (dBuV/m)	Pol (v/h)	Limit	Margin	Peak / QP / Avg	Table Angle (deg)	Ant. Height (cm)	Comments
4960.00	51.05	H	73.97	-22.92	Peak	212.25	111.38	
4960.00	44.38	H	53.97	-9.59	Avg	212.25	111.38	
7440.00	45.90	H	73.97	-28.07	Peak	68.75	127.14	
7440.00	34.68	H	53.97	-19.29	Avg	68.75	127.14	
9920.00								Not in Restricted Band
9920.00								Done via Conducted
12400.00	50.39	H	73.97	-23.58	Peak	66.25	127.38	
12400.00	38.62	H	53.97	-15.35	Avg	66.25	127.38	
14880.00								No Emission
14880.00								Detected
17360.00								No Emission
17360.00								Detected
19840.00								No Emission
19840.00								Detected
22320.00								No Emission
22320.00								Detected
24800.00								No Emission
24800.00								Detected

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



FCC 15.247 and RSS-247

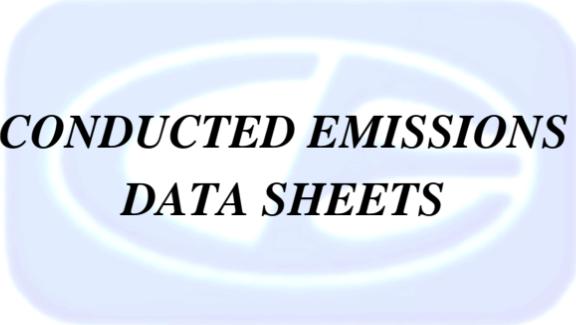
Telkonet, Inc.
Aida Thermostat
Model: 6700

Date: 02/15/2023
Lab: D
Tested By: Kyle Fujimoto

Non Harmonic Emissions from the Tx and Digital Portion - 9 kHz to 30 MHz

Non Harmonic Emissions from the Tx and Digital Portion - 1 GHz to 25 GHz

[illegible]



***CONDUCTED EMISSIONS
DATA SHEETS***

**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

*Aida Thermostat and Aida Controller**Models: 6700 and 6800*

Title: FCC Class B - Black Lead

File: 3 - Pre-Scan - Black Lead - No Display - FCC Class B - 02-22-2023.set

Operator: Kyle Fujimoto

EUT Type: Aida Controller

EUT Condition: The EUT is continuously transmitting WiFi, BLE, and Zigbee

Company: Telkonet, Inc.

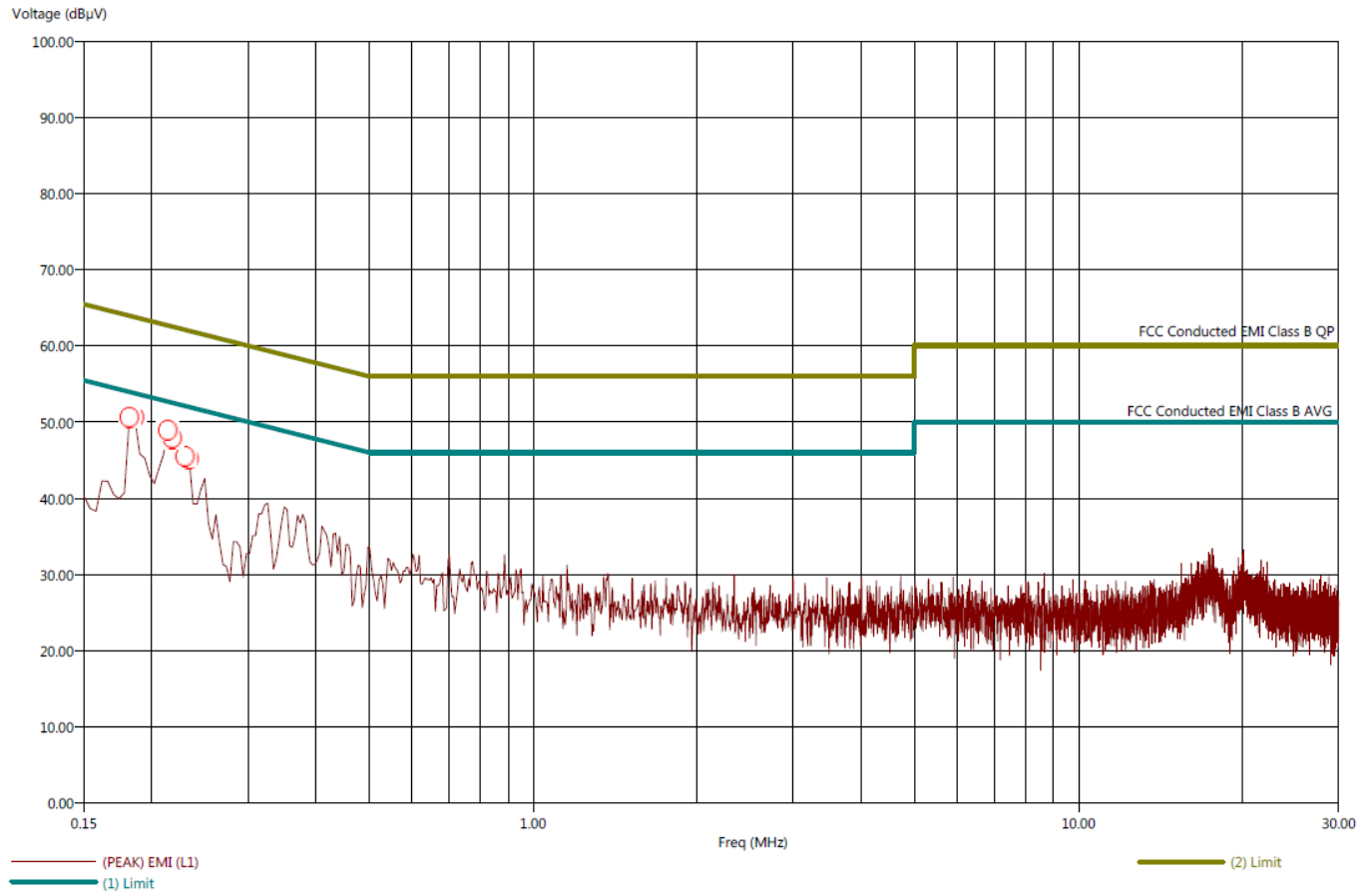
Model: 6800

S/N: N/A

No Display

2/23/2023 1:19:58 PM
Sequence: Preliminary Scan

Black Lead



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



Title: FCC Class B - Black Lead
File: 3 - Final Scan - Black Lead - No Display - FCC Class B - 02-22-2023.set
Operator: Kyle Fujimoto
EUT Type: Aida Controller
EUT Condition: The EUT is continuously transmitting WiFi, BLE, and Zigbee
Company: Telkonet, Inc.
Model: 6800
S/N: N/A
No Display

2/23/2023 1:21:09 PM
Sequence: Final Measurements

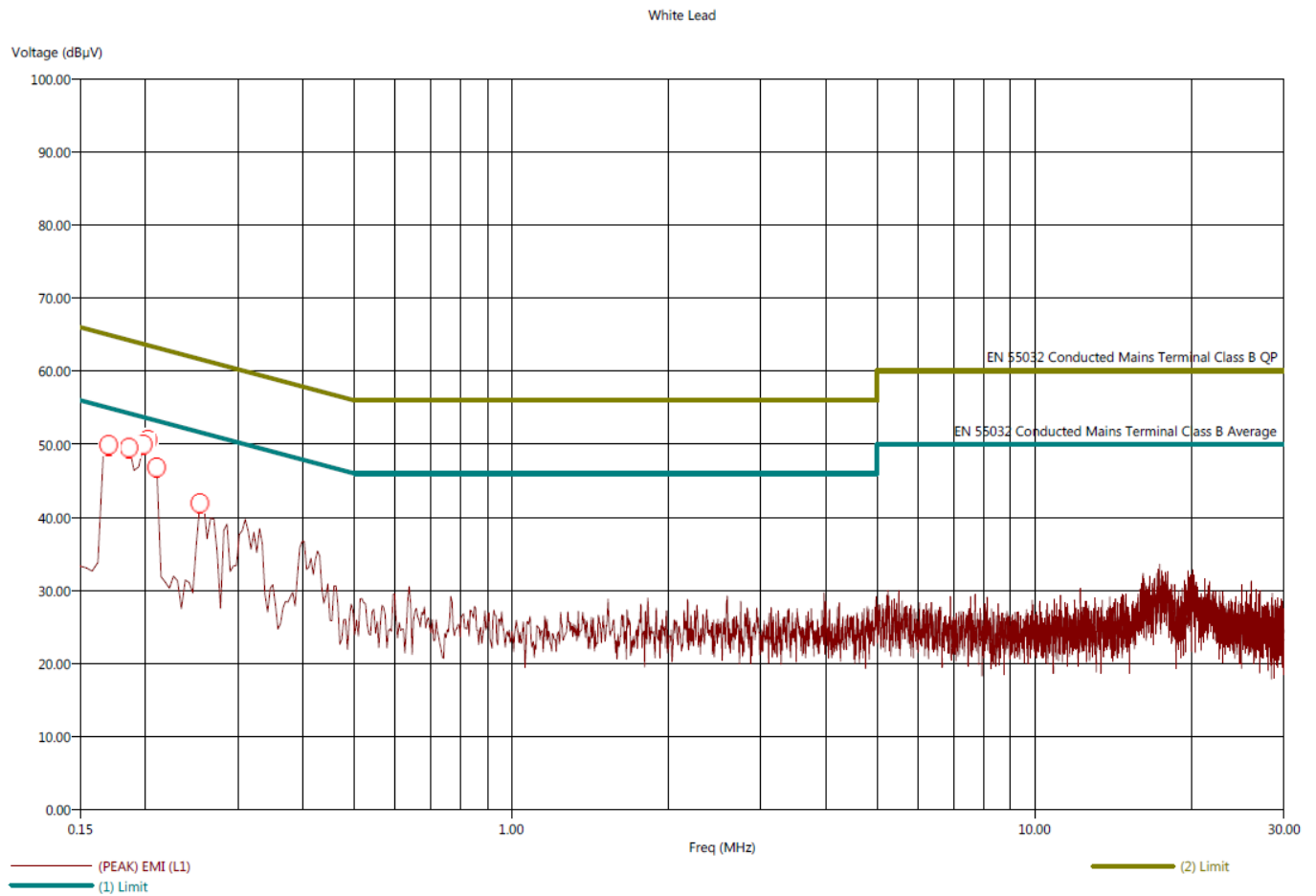
Black Lead									
Freq (MHz)	(PEAK) EMI (dBµV)	(AVG) EMI (dBµV)	(PEAK) Margin (dB)	(AVG) Margin (AVG) (dB)	(AVG) Limit (dBµV)	Cable (dB)	Transducer (dB)	Filter (dB)	
0.182	52.08	38.58	-1.49	-14.99	53.56	0.01	0.17	10.10	
0.186	53.16	38.55	-0.86	-15.47	54.02	0.01	0.17	10.10	
0.214	49.98	36.81	-2.87	-16.04	52.85	0.01	0.16	10.10	
0.218	49.26	35.63	-3.31	-16.94	52.56	0.01	0.16	10.10	
0.230	48.34	34.38	-3.85	-17.81	52.19	0.01	0.15	10.10	
0.234	47.93	34.24	-4.12	-17.81	52.05	0.01	0.15	10.10	





Title: EN 55032 Class B - White Lead
File: 4 - Pre-Scan - White Lead - No Display - FCC Class B - 02-22-2023.set
Operator: Kyle Fujimoto
EUT Type: Aida Controller
EUT Condition: The EUT is continuously transmitting WiFi, BLE, and Zigbee
Company: Telkonet, Inc.
Model: 6800
S/N: N/A
No Display

2/23/2023 1:23:22 PM
Sequence: Preliminary Scan





**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

Title: FCC Class B - White Lead

File: 4 - Final Scan - White Lead - No Display - FCC Class B - 02-22-2023.set

Operator: Kyle Fujimoto

EUT Type: Aida Controller

EUT Condition: The EUT is continuously transmitting WiFi, BLE, and Zigbee

Company: Telkonet, Inc.

Model: 6800

S/N: N/A

No Display

2/23/2023 1:24:23 PM

Sequence: Final Measurements

White Lead

Freq (MHz)	(PEAK) EMI (dBμV)	(AVG) EMI (dBμV)	(PEAK) Margin (AVG) (dB)	(AVG) Margin (AVG) (dB)	(AVG) Limit (dBμV)	Cable (dB)	Transducer (dB)	Filter (dB)
0.170	53.45	37.49	-0.73	-16.69	54.18	0.01	0.16	10.10
0.186	52.85	37.11	-0.95	-16.69	53.80	0.01	0.16	10.10
0.198	50.89	35.52	-2.12	-17.49	53.01	0.01	0.15	10.10
0.202	49.59	34.94	-3.26	-17.91	52.85	0.01	0.15	10.10
0.210	49.43	34.80	-3.32	-17.95	52.75	0.01	0.15	10.10
0.254	43.90	29.21	-7.31	-22.00	51.21	0.01	0.14	10.10



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

*Aida Thermostat and Aida Controller**Models: 6700 and 6800*

Title: FCC Class B - Black Lead

File: 1 - Pre-Scan - Black Lead - With Display - FCC Class B - 02-22-2023.set

Operator: Kyle Fujimoto

EUT Type: Aida Thermostat

EUT Condition: The EUT is continuously transmitting WiFi, BLE, and Zigbee

Company: Telkonet, Inc.

Model: 6700

S/N: N/A

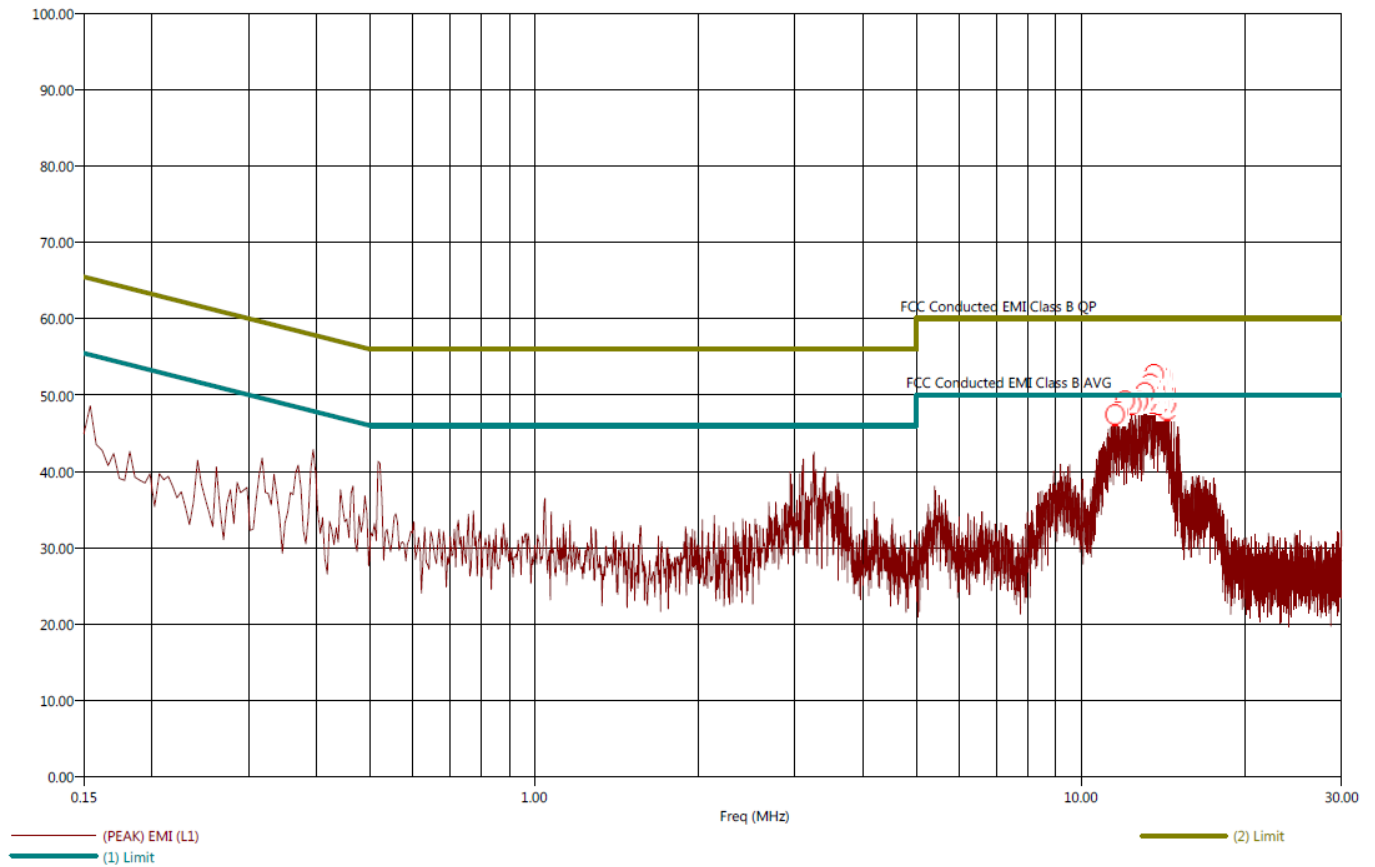
With Display

2/22/2023 9:00:30 AM

Sequence: Preliminary Scan

Black Lead

Voltage (dBμV)



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**
FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report
Aida Thermostat and Aida Controller
Models: 6700 and 6800

Title: FCC Class B - Black Lead

File: 1 - Final Scan - Black Lead - With Display - FCC Class B - 02-22-2023.set

Operator: Kyle Fujimoto

EUT Type: Aida Thermostat

EUT Condition: The EUT is continuously transmitting WiFi, BLE, and Zigbee

Company: Telkonet, Inc.

Model: 6700

S/N: N/A

With Display

2/22/2023 9:07:12 AM

Sequence: Final Measurements

Black Lead

Freq (MHz)	(PEAK) EMI (dBµV)	(AVG) EMI (dBµV)	(PEAK) Margin (AVG) (dB)	(AVG) Margin (AVG) (dB)	(AVG) Limit (dBµV)	Cable (dB)	Transducer (dB)	Filter (dB)
11.546	51.78	39.38	1.78	-10.62	50.00	0.43	0.39	10.10
11.690	50.56	39.40	0.56	-10.60	50.00	0.44	0.39	10.10
12.050	50.45	39.59	0.45	-10.41	50.00	0.45	0.40	10.10
12.386	50.12	39.64	0.12	-10.36	50.00	0.46	0.41	10.10
12.738	51.71	40.82	1.71	-9.18	50.00	0.47	0.42	10.10
13.086	54.43	42.30	4.43	-7.70	50.00	0.48	0.43	10.10
13.206	55.02	42.39	5.02	-7.61	50.00	0.48	0.43	10.10
13.266	54.56	42.78	4.56	-7.22	50.00	0.48	0.43	10.10
13.298	55.07	42.72	5.07	-7.28	50.00	0.48	0.43	10.10
13.346	53.20	42.76	3.20	-7.24	50.00	0.48	0.43	10.10
13.362	55.13	42.71	5.13	-7.29	50.00	0.48	0.43	10.10
13.386	53.80	42.76	3.80	-7.24	50.00	0.49	0.43	10.10
13.454	54.87	42.17	4.87	-7.83	50.00	0.49	0.44	10.10
13.494	54.99	42.80	4.99	-7.20	50.00	0.49	0.44	10.10
13.546	54.77	42.47	4.77	-7.53	50.00	0.49	0.44	10.10
13.610	54.67	42.10	4.67	-7.90	50.00	0.49	0.44	10.10
13.654	54.08	42.25	4.08	-7.75	50.00	0.49	0.44	10.10
13.722	55.18	41.78	5.18	-8.22	50.00	0.49	0.44	10.10
13.786	55.46	42.15	5.46	-7.85	50.00	0.50	0.44	10.10
13.794	54.90	43.20	4.90	-6.80	50.00	0.50	0.44	10.10
13.838	55.30	41.49	5.30	-8.51	50.00	0.50	0.44	10.10
13.846	55.46	41.46	5.46	-8.54	50.00	0.50	0.44	10.10
13.854	55.89	43.13	5.89	-6.87	50.00	0.50	0.44	10.10
13.870	54.96	44.30	4.96	-5.70	50.00	0.50	0.44	10.10
13.886	57.80	43.68	7.80	-6.32	50.00	0.50	0.45	10.10
13.894	56.46	44.71	6.46	-5.29	50.00	0.50	0.45	10.10
13.910	56.77	40.98	6.77	-9.02	50.00	0.50	0.45	10.10
13.946	55.86	41.25	5.86	-8.75	50.00	0.50	0.45	10.10
13.966	56.17	41.94	6.17	-8.06	50.00	0.50	0.45	10.10
13.990	55.68	41.15	5.68	-8.85	50.00	0.50	0.45	10.10
13.998	54.33	40.84	4.33	-9.16	50.00	0.50	0.45	10.10
14.090	55.72	40.73	5.72	-9.27	50.00	0.50	0.45	10.10
14.134	55.29	39.75	5.29	-10.25	50.00	0.50	0.45	10.10
14.294	52.38	38.76	2.38	-11.24	50.00	0.51	0.45	10.10
14.338	52.78	39.71	2.78	-10.29	50.00	0.51	0.46	10.10
14.378	52.13	37.10	2.13	-12.90	50.00	0.51	0.46	10.10
14.390	51.96	36.79	1.96	-13.21	50.00	0.51	0.46	10.10
14.398	52.32	36.34	2.32	-13.66	50.00	0.51	0.46	10.10
14.406	51.69	37.18	1.69	-12.82	50.00	0.51	0.46	10.10
14.418	51.53	36.29	1.53	-13.71	50.00	0.51	0.46	10.10

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

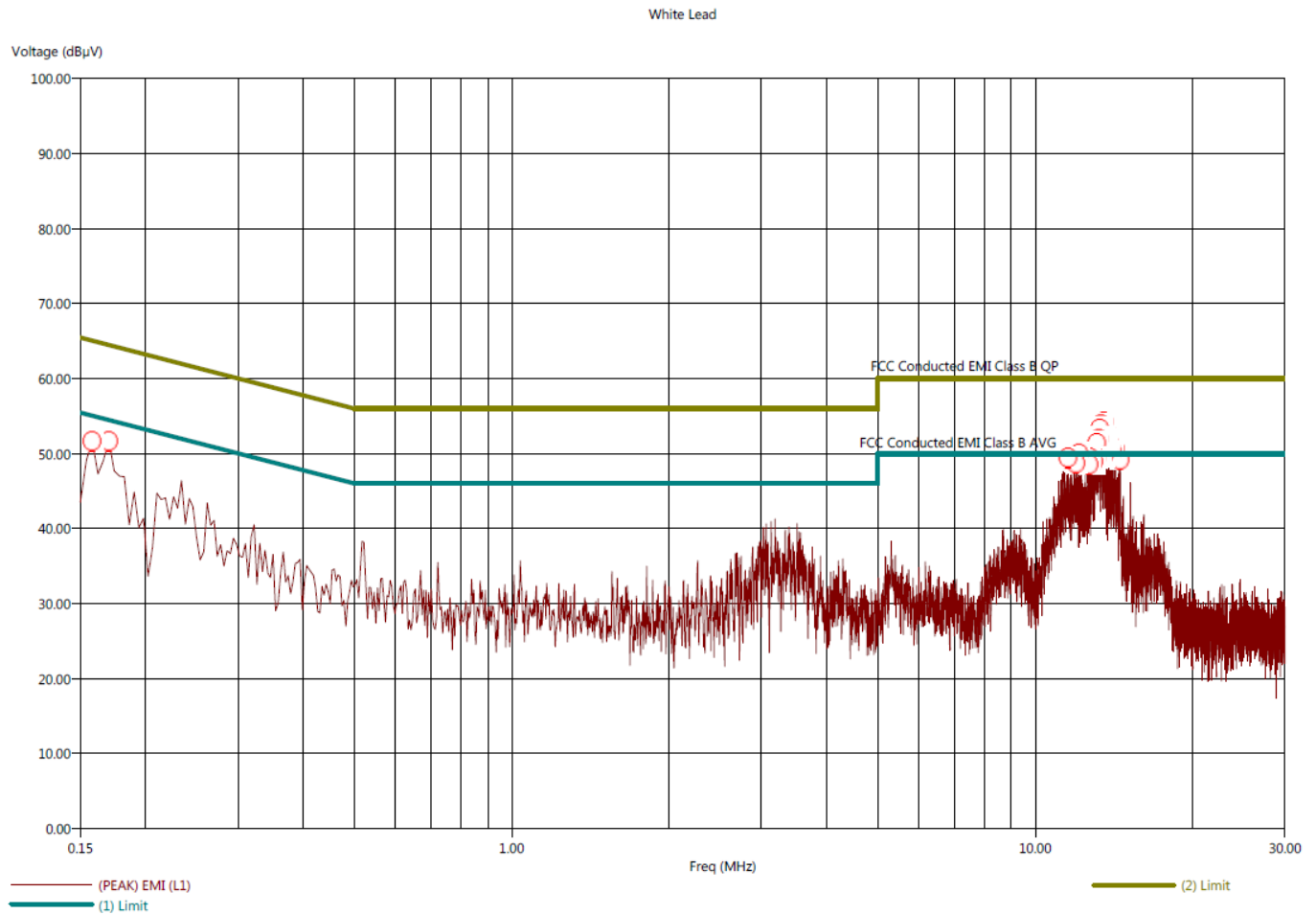
**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

*Aida Thermostat and Aida Controller**Models: 6700 and 6800*

Title: FCC Class B - White Lead
File: 2 - Pre-Scan - White Lead - Tx Mode - FCC Class B - 02-22-2023.set
Operator: Kyle Fujimoto
EUT Type: Aida Thermostat
EUT Condition: The EUT is continuously transmitting WiFi, BLE, and Zigbee
Company: Telkonet, Inc.
Model: 6700
S/N: N/A
With Display

2/22/2023 9:15:48 AM
Sequence: Preliminary Scan



Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

Title: FCC Class B - White Lead

File: 2 - Final Scan - White Lead - With Display - FCC Class B - 02-22-2023.set

Operator: Kyle Fujimoto

EUT Type: Aida Thermostat

EUT Condition: The EUT is continuously transmitting WiFi, BLE, and Zigbee

Company: Telkonet, Inc.

Model: 6700

S/N: N/A

With Display

2/22/2023 9:23:17 AM

Sequence: Final Measurements

White Lead

Freq (MHz)	(PEAK) EMI (dBμV)	(AVG) EMI (dBμV)	(PEAK) Margin (dB)	(AVG) Margin (AVG) (dB)	(AVG) Limit (dBμV)	Cable (dB)	Transducer (dB)	Filter (dB)
0.158	54.44	39.06	-0.62	-16.00	55.06	0.01	0.18	10.10
0.170	54.94	38.26	0.47	-16.21	54.47	0.01	0.17	10.10
11.550	48.00	36.84	-2.00	-13.16	50.00	0.43	0.50	10.10
11.962	48.21	37.64	-1.79	-12.36	50.00	0.44	0.52	10.10
12.122	48.94	37.74	-1.06	-12.26	50.00	0.45	0.53	10.10
12.670	51.55	40.55	1.55	-9.45	50.00	0.47	0.54	10.10
12.706	51.69	40.83	1.69	-9.17	50.00	0.47	0.55	10.10
12.934	51.96	41.30	1.96	-8.70	50.00	0.47	0.55	10.10
12.950	52.05	41.54	2.05	-8.46	50.00	0.47	0.55	10.10
13.090	53.47	41.38	3.47	-8.62	50.00	0.48	0.56	10.10
13.110	53.30	41.37	3.30	-8.63	50.00	0.48	0.56	10.10
13.134	53.30	41.56	3.30	-8.44	50.00	0.48	0.56	10.10
13.154	52.80	41.63	2.80	-8.37	50.00	0.48	0.56	10.10
13.186	53.44	41.86	3.44	-8.14	50.00	0.48	0.56	10.10
13.210	53.44	42.16	3.44	-7.84	50.00	0.48	0.56	10.10
13.226	52.63	42.46	2.63	-7.54	50.00	0.48	0.56	10.10
13.238	54.11	42.28	4.11	-7.72	50.00	0.48	0.56	10.10
13.258	54.08	41.74	4.08	-8.26	50.00	0.48	0.57	10.10
13.282	53.13	41.53	3.13	-8.47	50.00	0.48	0.57	10.10
13.298	53.35	41.55	3.35	-8.45	50.00	0.48	0.57	10.10
13.310	54.23	41.83	4.23	-8.17	50.00	0.48	0.57	10.10
13.358	53.16	40.96	3.16	-9.04	50.00	0.48	0.57	10.10
13.366	52.86	41.62	2.86	-8.38	50.00	0.48	0.57	10.10
13.382	53.51	41.23	3.51	-8.77	50.00	0.49	0.57	10.10
13.394	53.76	41.06	3.76	-8.94	50.00	0.49	0.57	10.10
13.418	53.44	40.77	3.44	-9.23	50.00	0.49	0.57	10.10
13.430	53.82	41.05	3.82	-8.95	50.00	0.49	0.57	10.10
13.486	53.78	40.50	3.78	-9.50	50.00	0.49	0.57	10.10
13.502	53.87	40.36	3.87	-9.64	50.00	0.49	0.57	10.10
13.518	53.25	40.52	3.25	-9.48	50.00	0.49	0.57	10.10
13.538	53.31	40.78	3.31	-9.22	50.00	0.49	0.57	10.10
13.554	52.76	40.26	2.76	-9.74	50.00	0.49	0.58	10.10
13.570	53.88	40.96	3.88	-9.04	50.00	0.49	0.58	10.10
13.586	53.69	41.09	3.69	-8.91	50.00	0.49	0.58	10.10
13.658	53.07	40.88	3.07	-9.12	50.00	0.49	0.58	10.10
13.674	51.70	39.76	1.70	-10.24	50.00	0.49	0.58	10.10
13.794	53.38	39.21	3.38	-10.79	50.00	0.50	0.58	10.10
13.802	53.50	39.64	3.50	-10.36	50.00	0.50	0.58	10.10
13.814	51.95	39.04	1.95	-10.96	50.00	0.50	0.58	10.10
14.030	52.03	37.36	2.03	-12.64	50.00	0.50	0.59	10.10
14.206	51.76	38.87	1.76	-11.13	50.00	0.51	0.60	10.10
14.526	50.64	32.90	0.64	-17.10	50.00	0.51	0.61	10.10

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

Report Number: **B30309X1**

Page E55



***BAND EDGES
DATA SHEETS***

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

**COMPATIBLE
ELECTRONICS**

FCC 15.247

Telkonet, Inc.
Aida Controller
Model: 6800

Date: 02/24/2023

Lab: D

Tested By: Kyle Fujimoto

Band Edges - No Display - Low Channel

[illegible]

**COMPATIBLE
ELECTRONICS**

FCC 15.247

Telkonet, Inc.
Aida Controller
Model: 6800

Date: 02/24/2023

Lab: D

Tested By: Kyle Fujimoto

Band Edges - No Display - High Channel

[illegible]

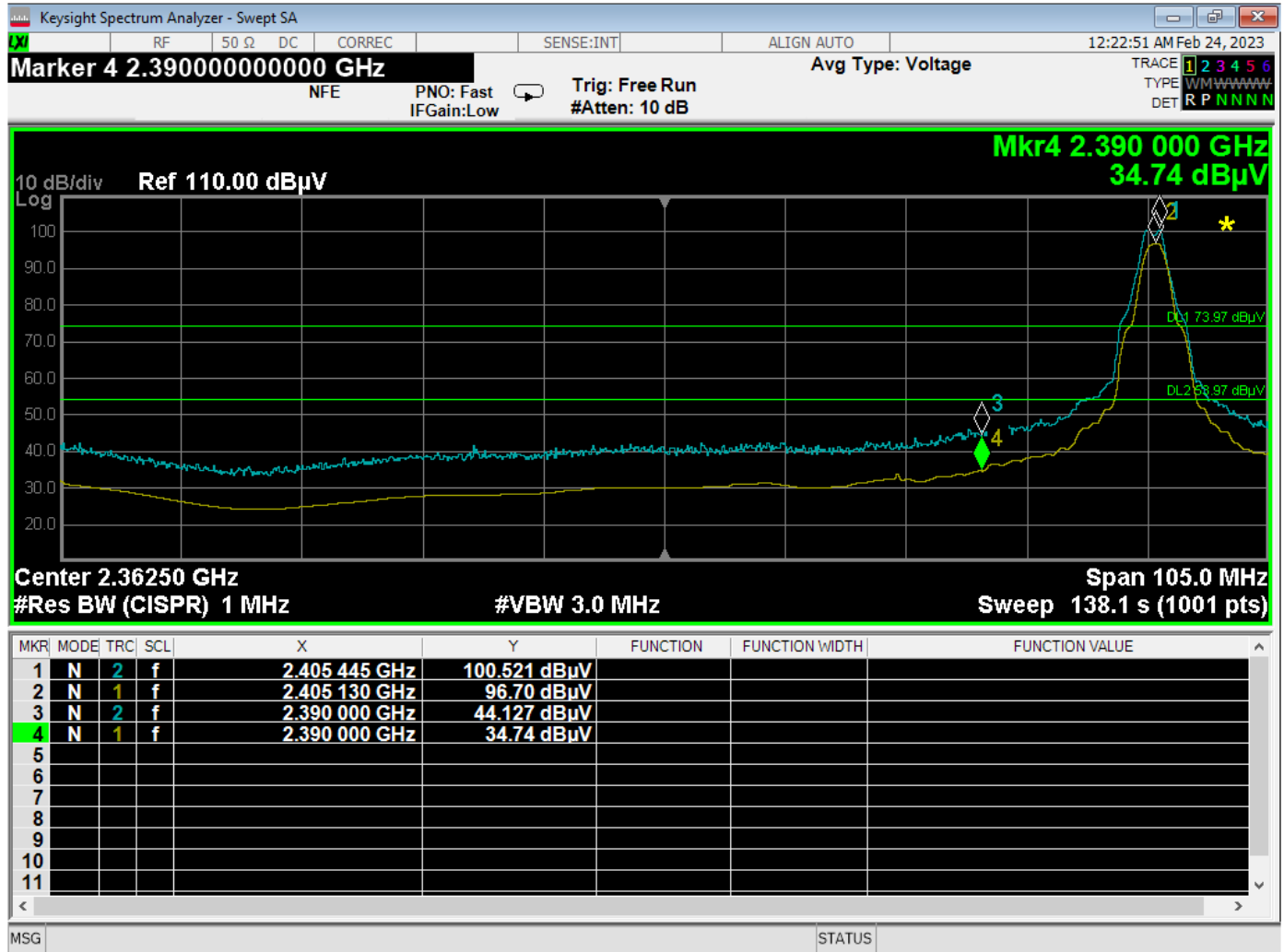


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



BE - 2405 MHz - Horizontal - Z-Axis Worst Case – No Display

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

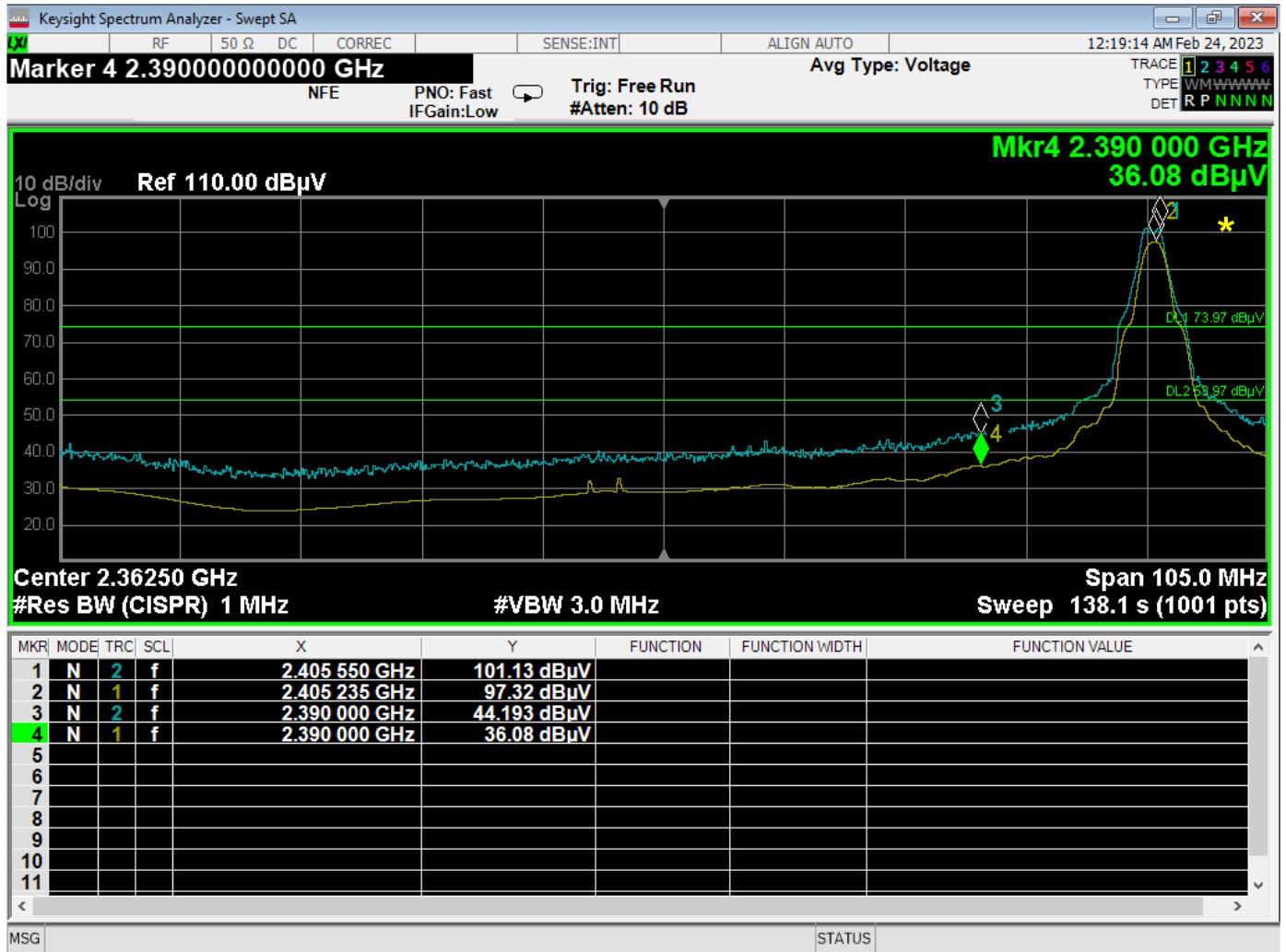


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



BE - 2405 MHz - Vertical - Y-Axis Worst Case – No Display

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

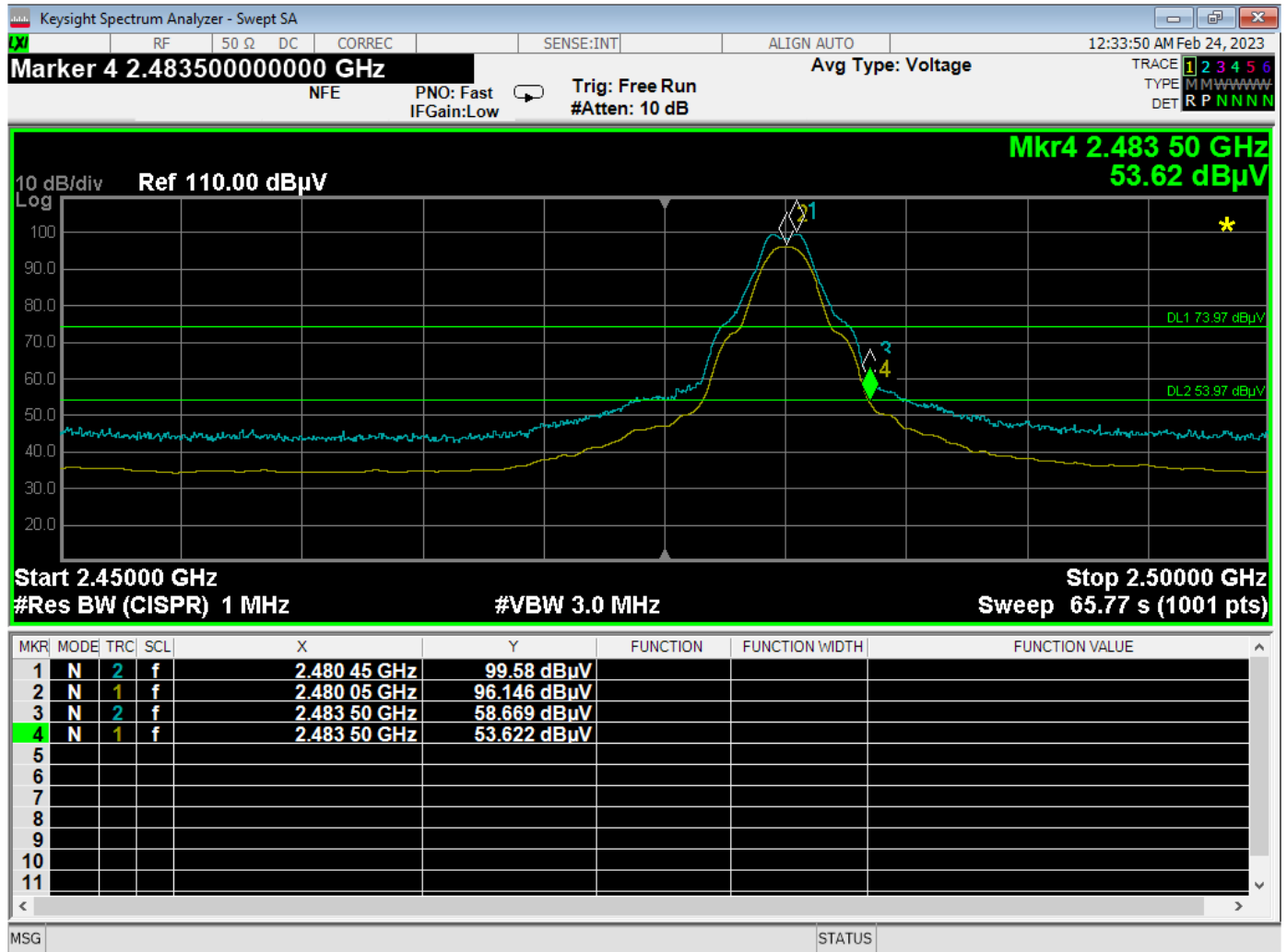


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



BE - 2480 MHz - Horizontal - Z-Axis Worst Case – No Display

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

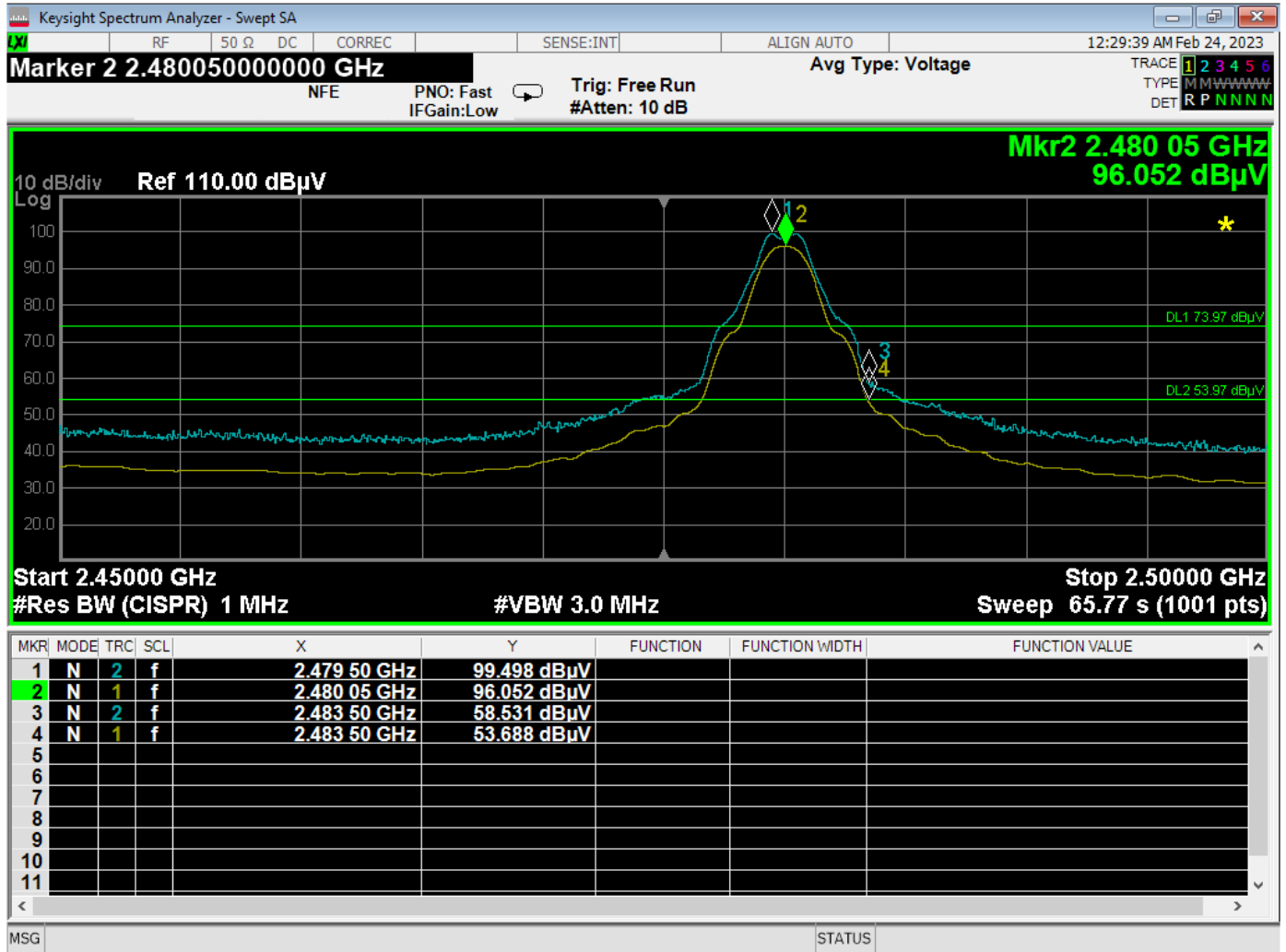


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



BE - 2480 MHz - Vertical - Y-Axis Worst Case – No Display

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

**COMPATIBLE
ELECTRONICS**

FCC 15.247

Telkonet, Inc.

Aida Thermostat

Model: 6700

Date: 02/16/2023

Lab: D

Tested By: Kyle Fujimoto

Band Edges - With Display - Low Channel

[illegible]

**COMPATIBLE
ELECTRONICS**

FCC 15.247

Telkonet, Inc.
Aida Thermostat
Model: 6700

Dates: 02/16/2023 and 02/17/2023

Lab: D

Tested By: Kyle Fujimoto

Band Edges - With Display - High Channel

[illegible]

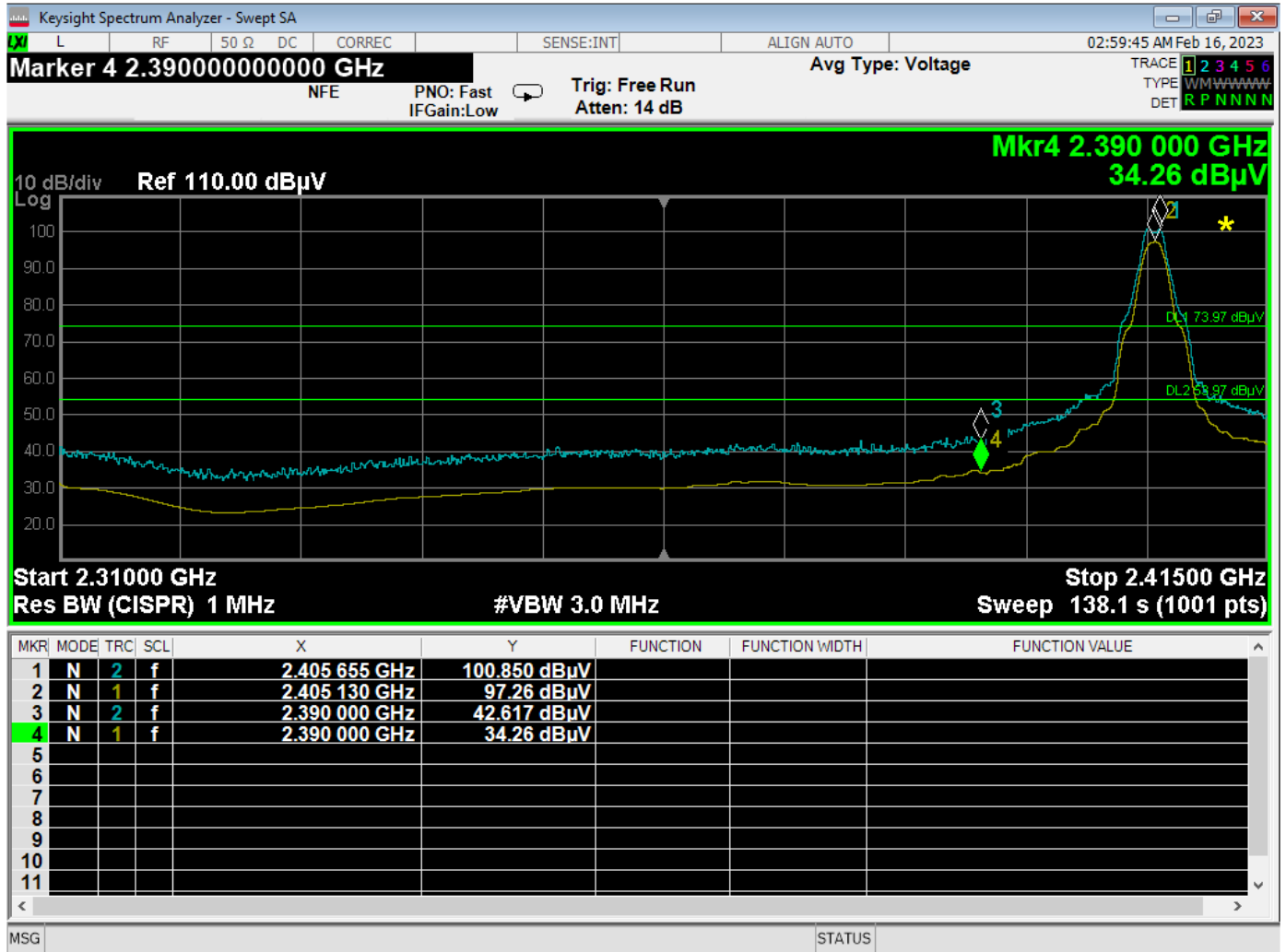


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



BE - 2405 MHz - Horizontal - Z-Axis Worst Case - With Display

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

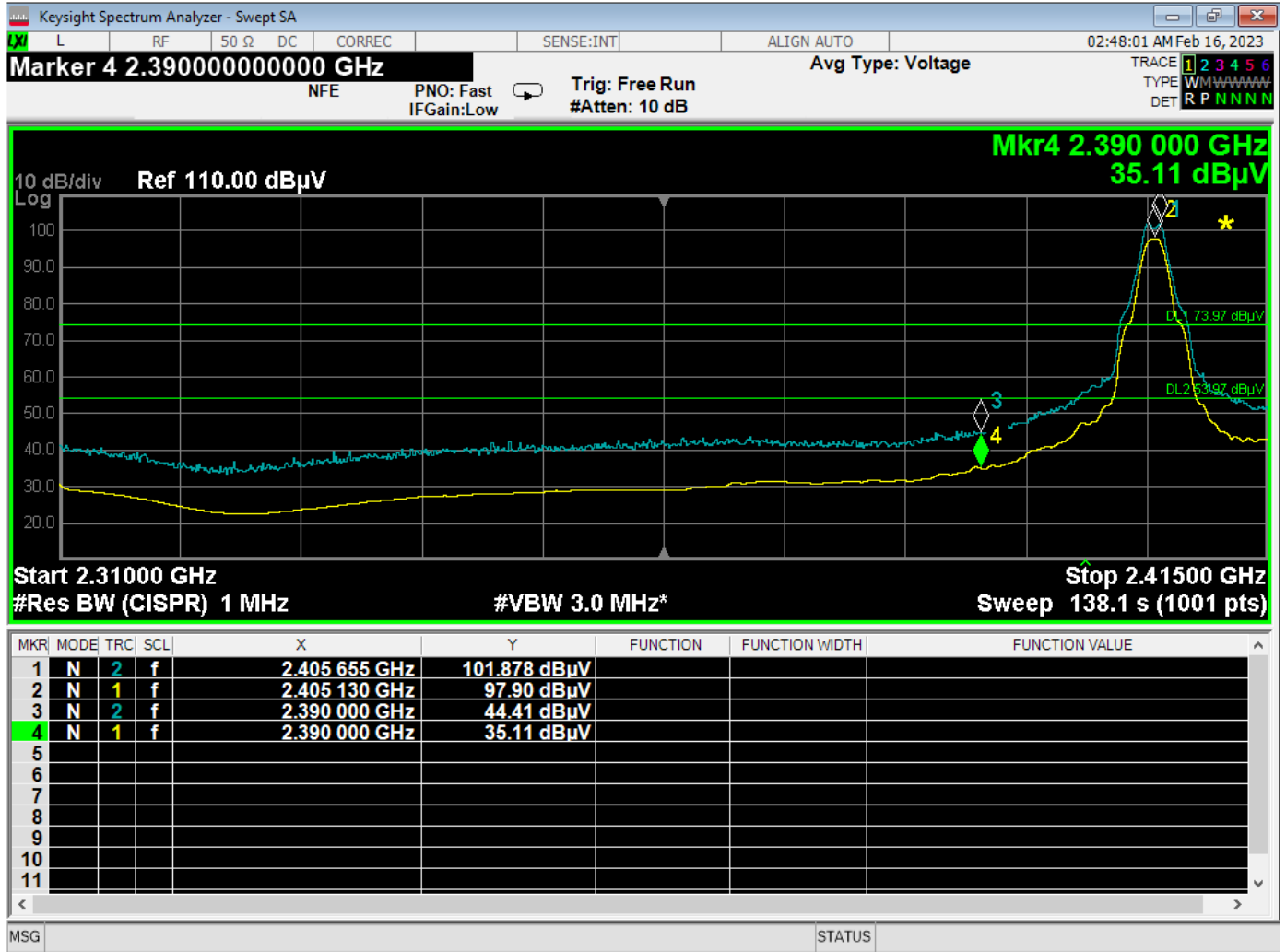


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



BE - 2405 MHz - Vertical - Y-Axis Worst Case - With Display

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

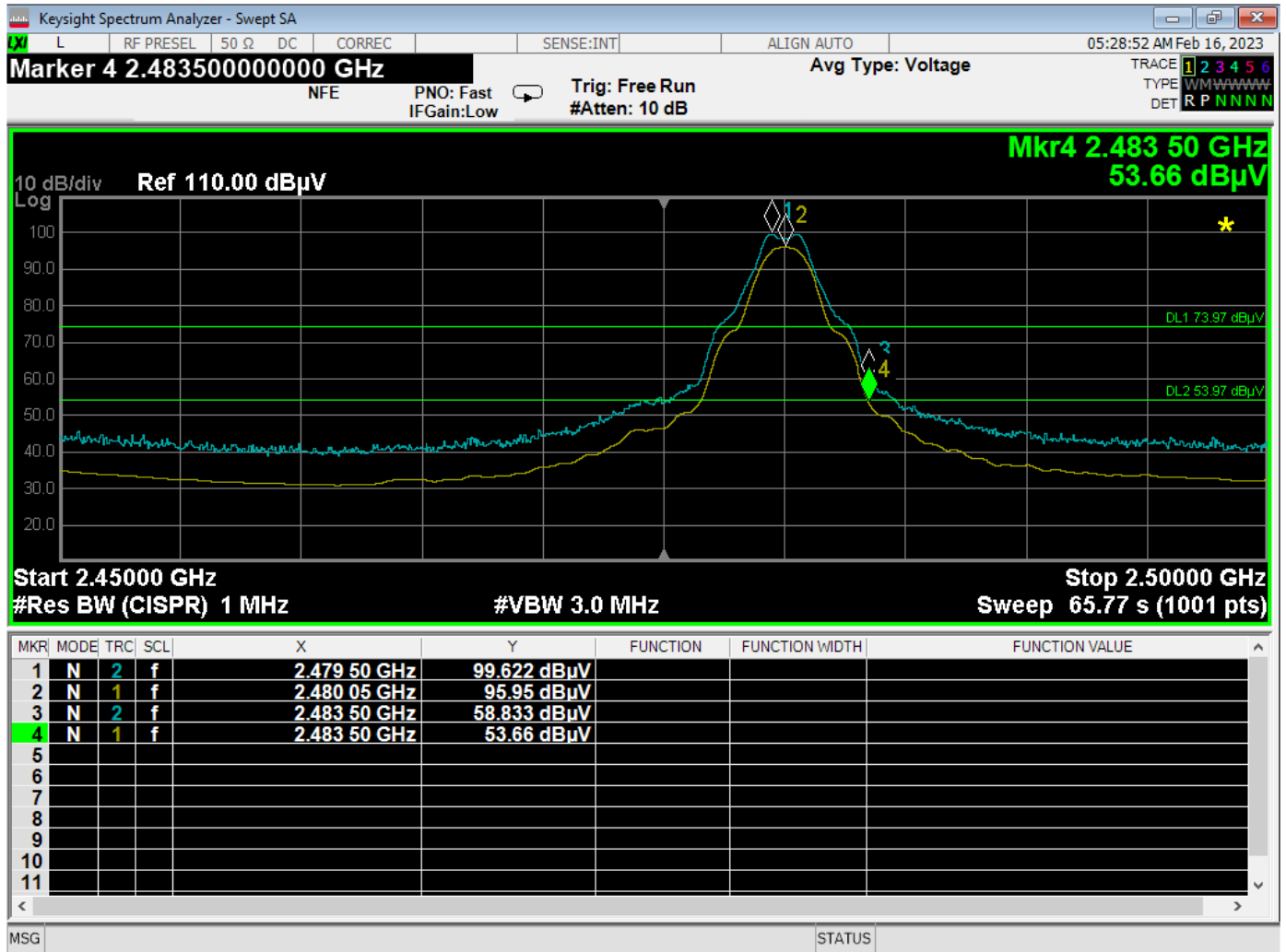


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



BE - 2480 MHz - Horizontal - Z-Axis Worst Case - With Display

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

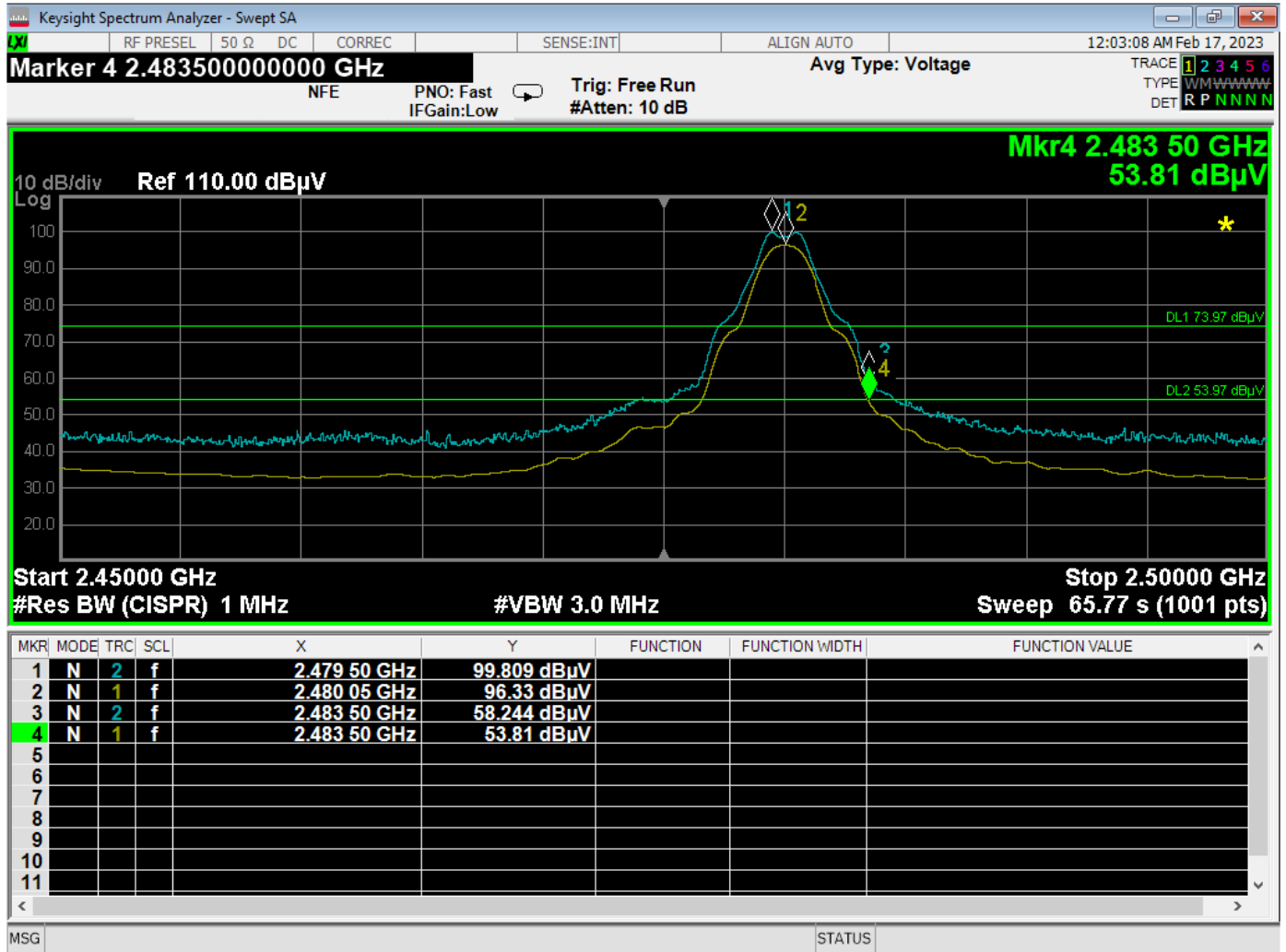
Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



BE - 2480 MHz - Vertical - Y-Axis Worst Case - With Display

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



***DTS BANDWIDTH
DATA SHEETS***

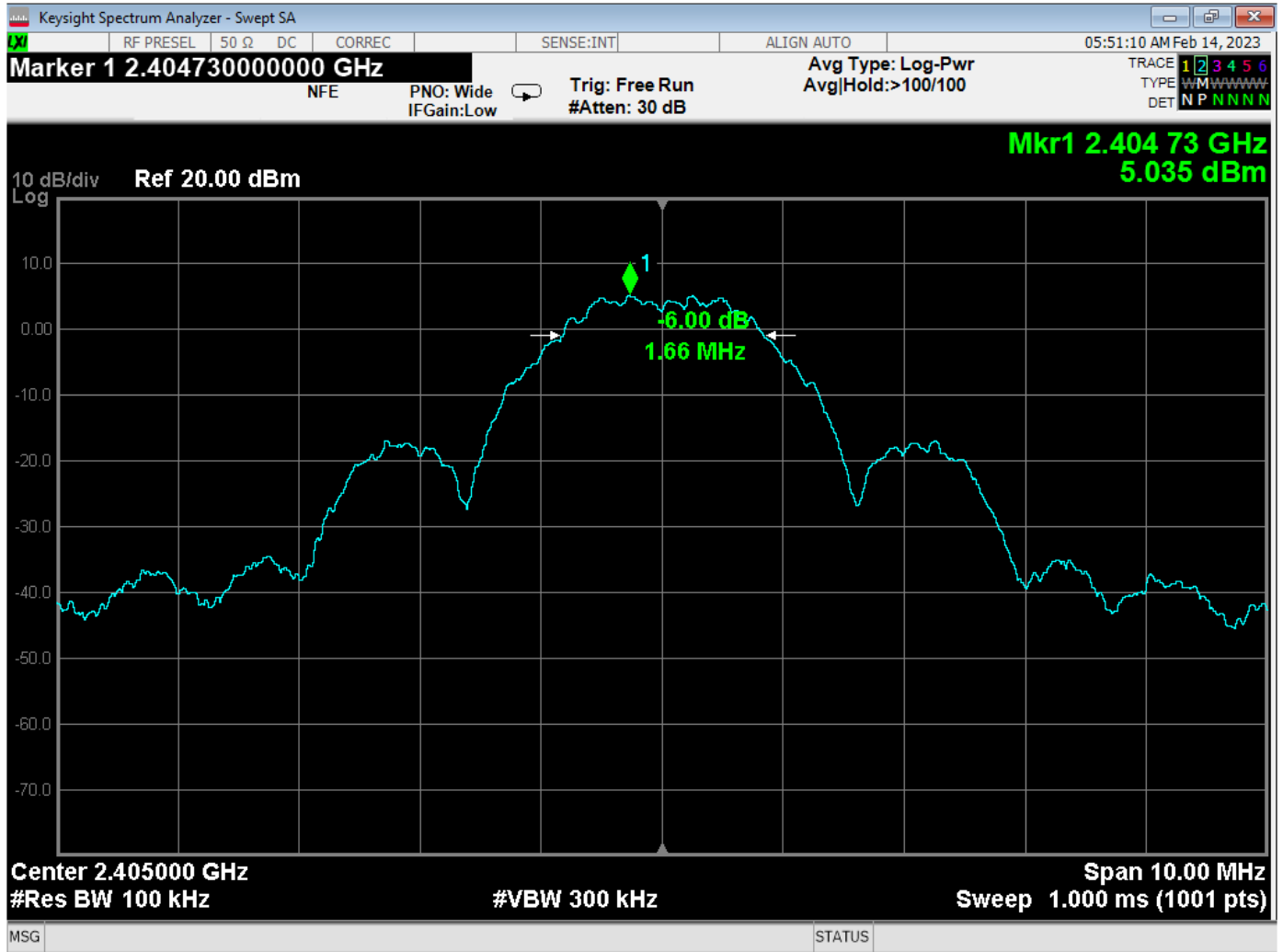


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



Bandwidth 6 dB - 2405 MHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

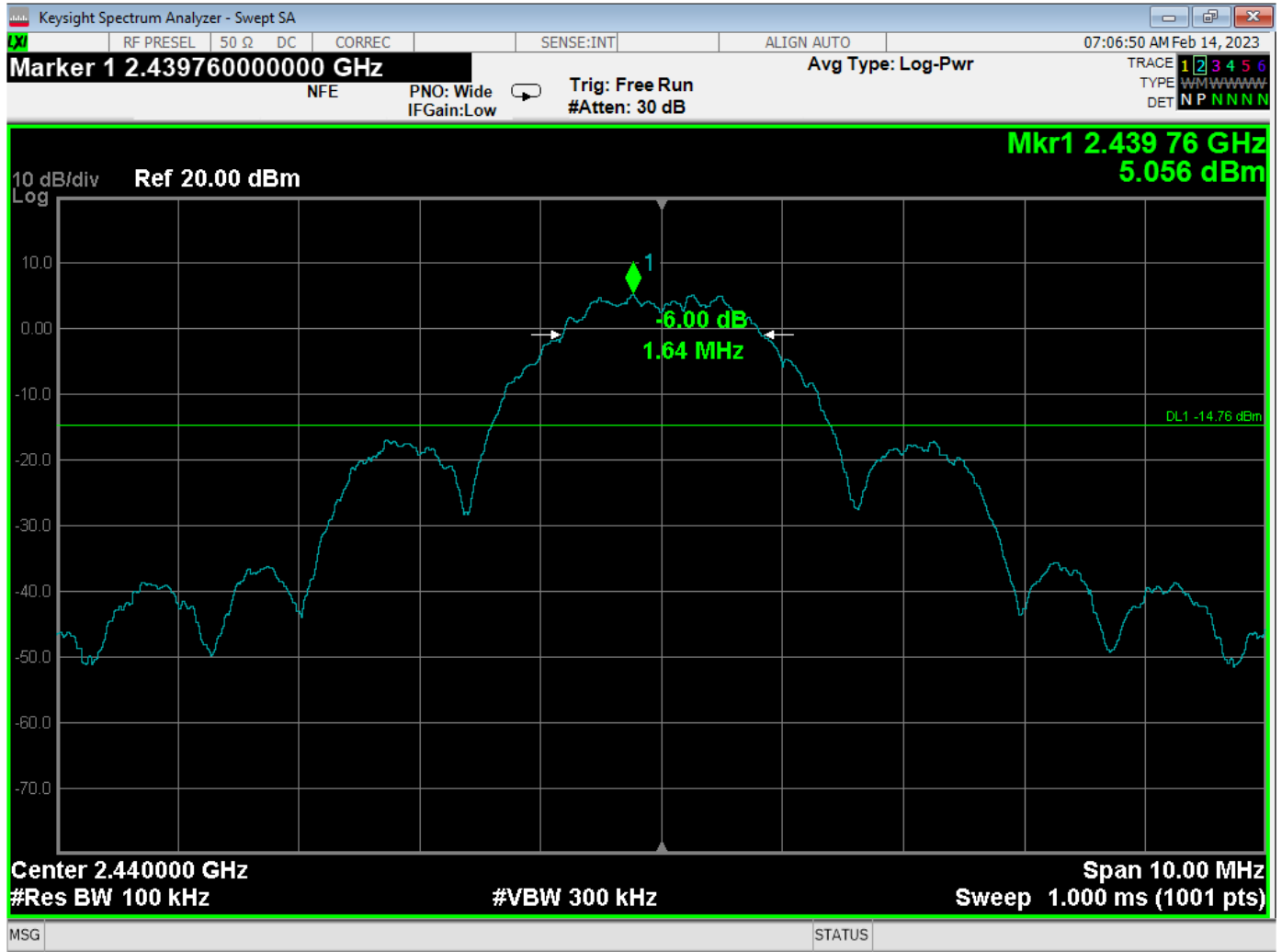


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



Bandwidth 6 dB - 2440 MHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

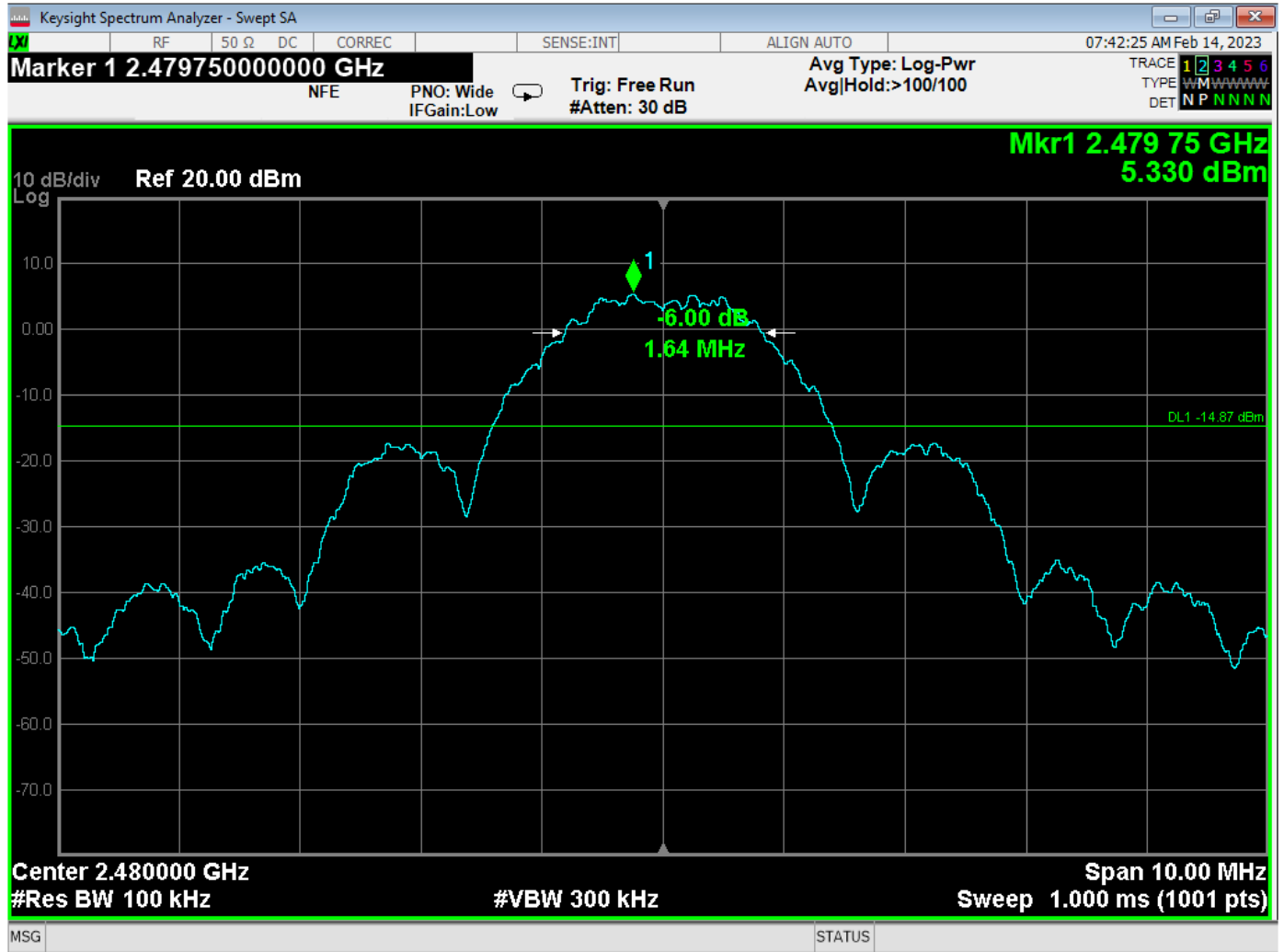


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



Bandwidth 6 dB - 2480 MHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



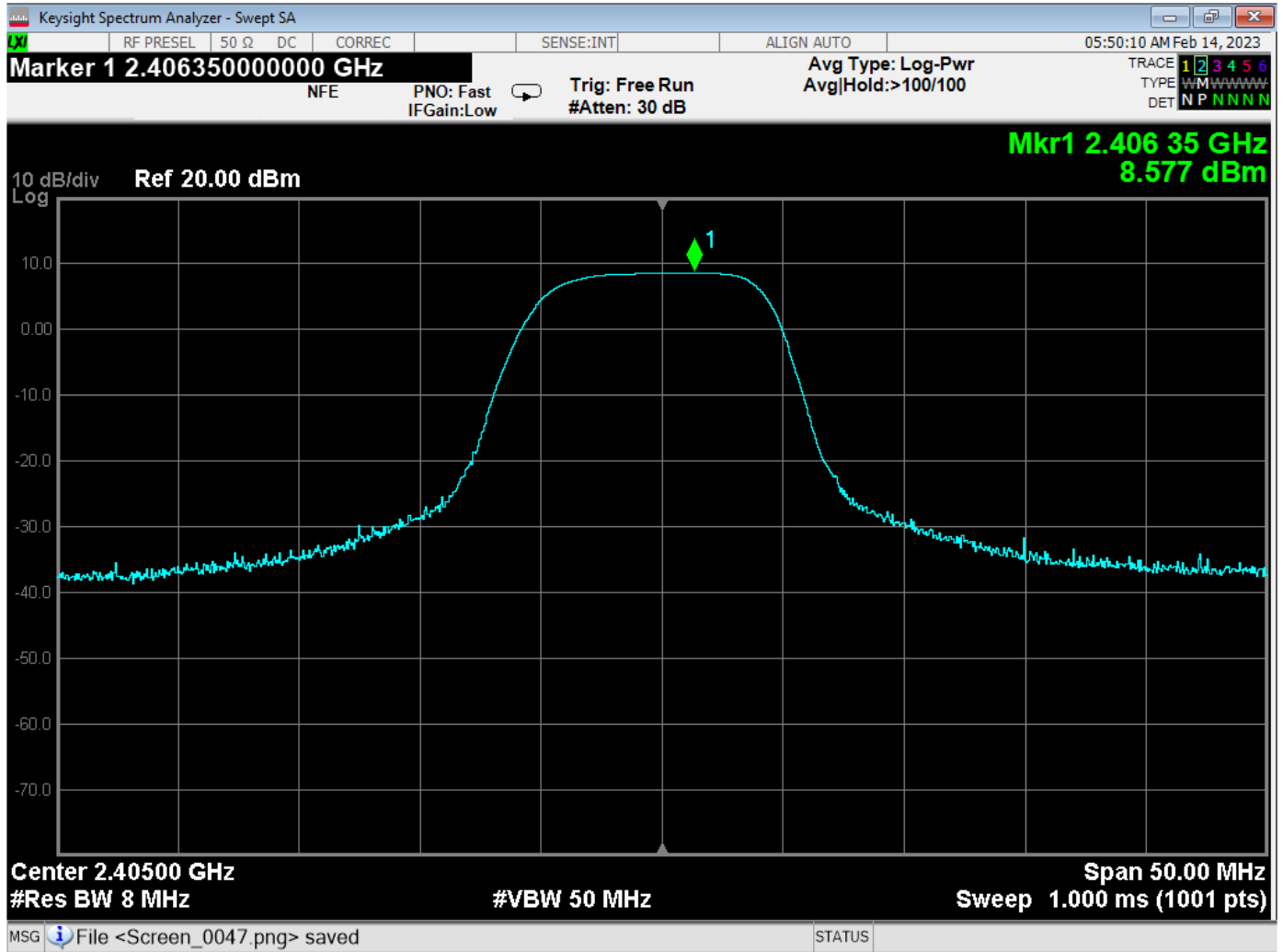
***PEAK OUTPUT POWER
DATA SHEETS***

**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



Peak Power Output - 2405 MHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

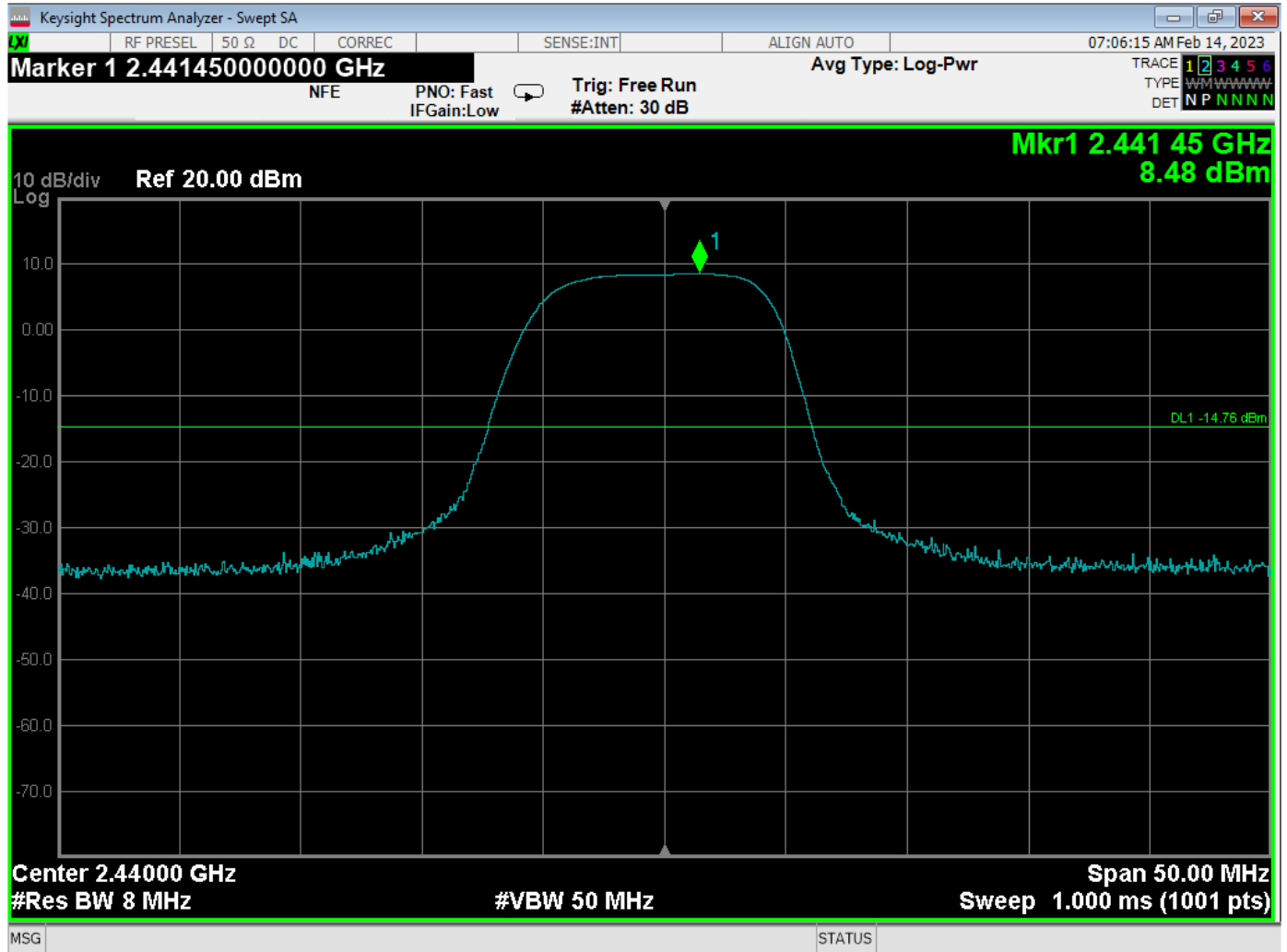
Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



Peak Power Output - 2440 MHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

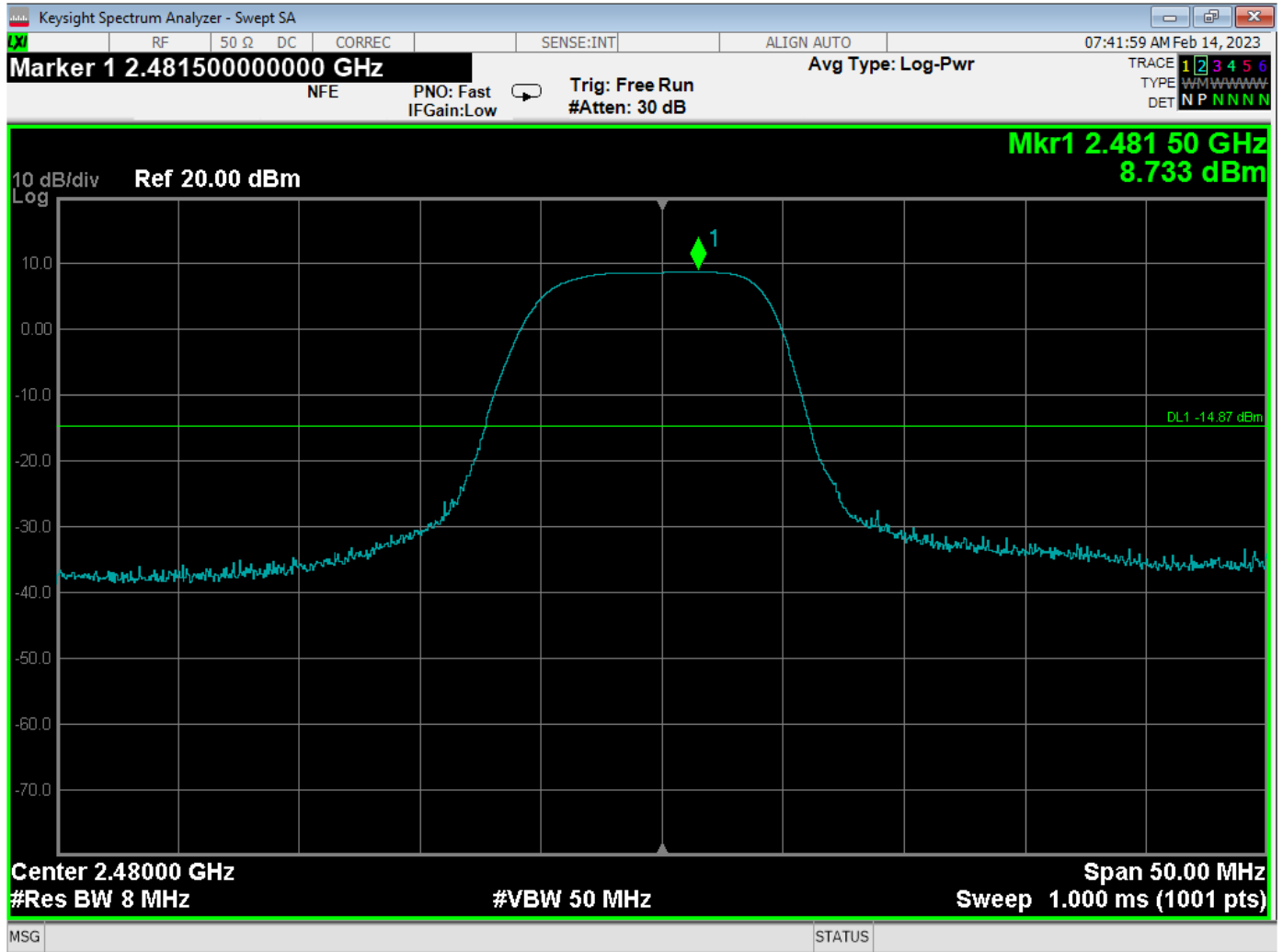


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



Peak Power Output - 2480 MHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



**COMPATIBLE
ELECTRONICS**

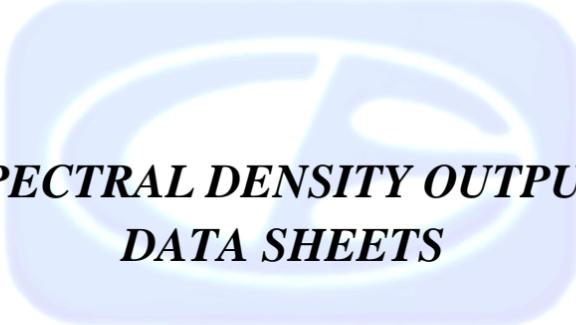
FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

Report Number: **B30309X1**

Page E76



***SPECTRAL DENSITY OUTPUT
DATA SHEETS***

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

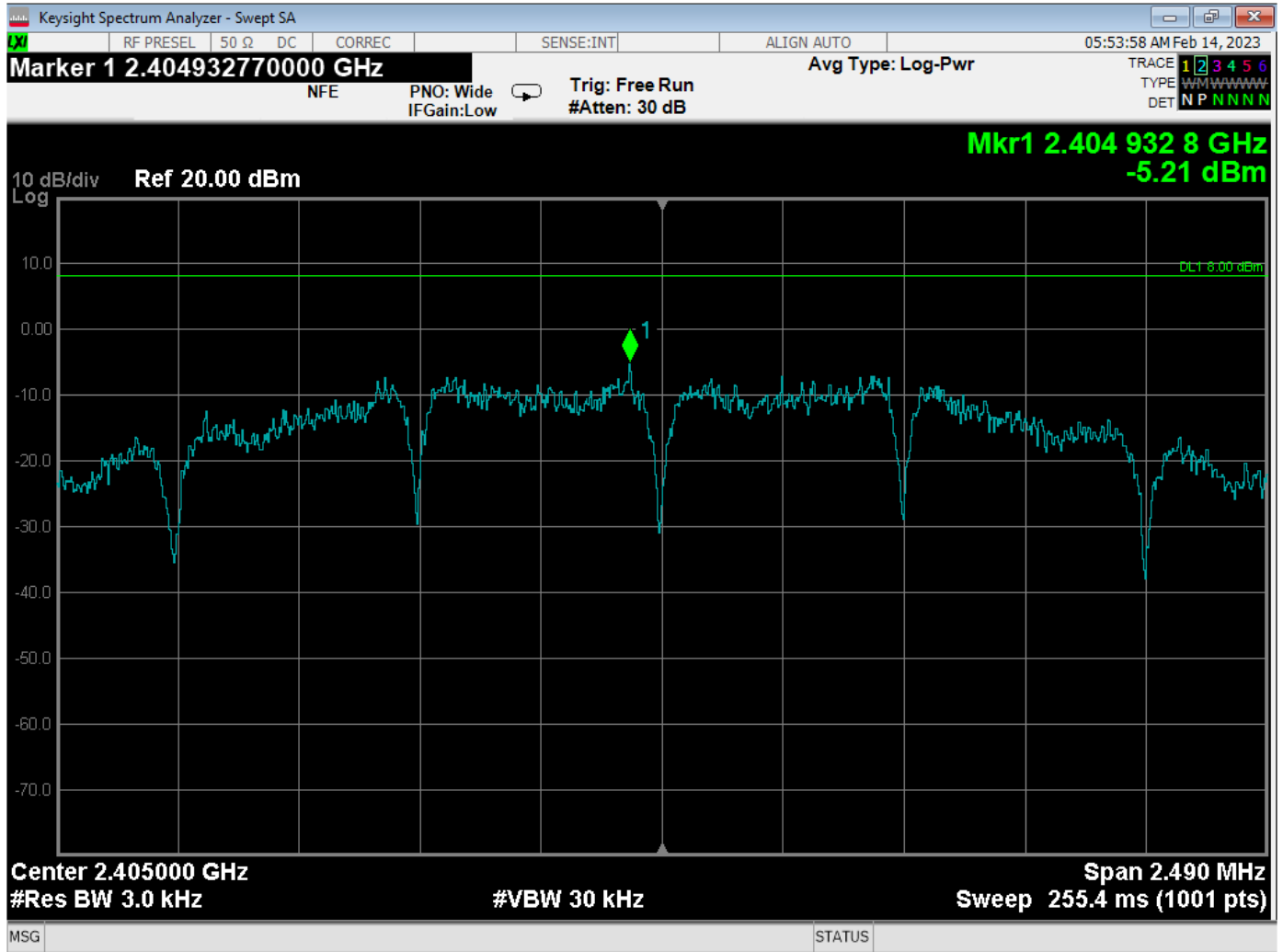
Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



Peak Power Spectral Density - 2405 MHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

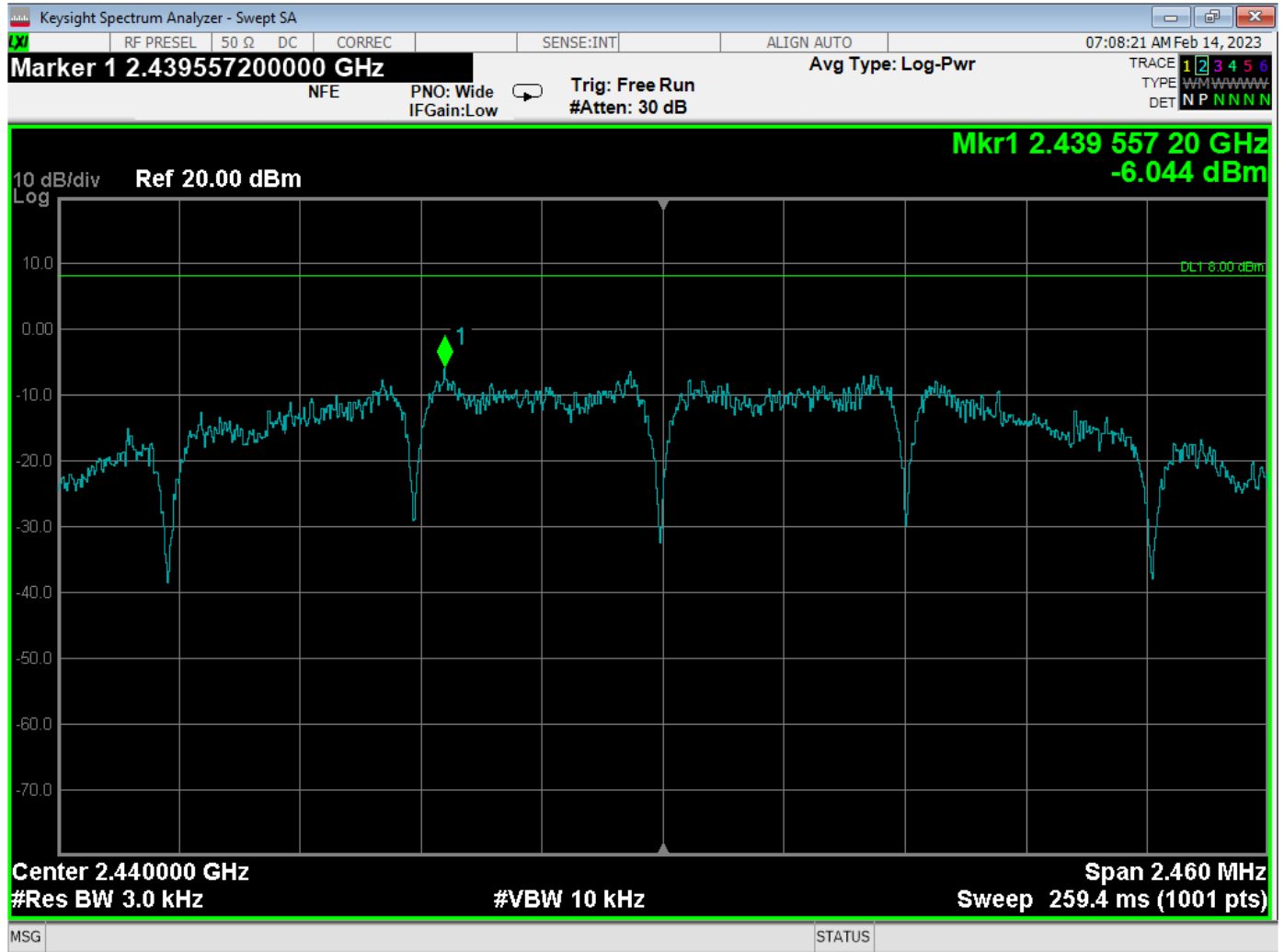


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



Peak Power Spectral Density - 2440 MHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

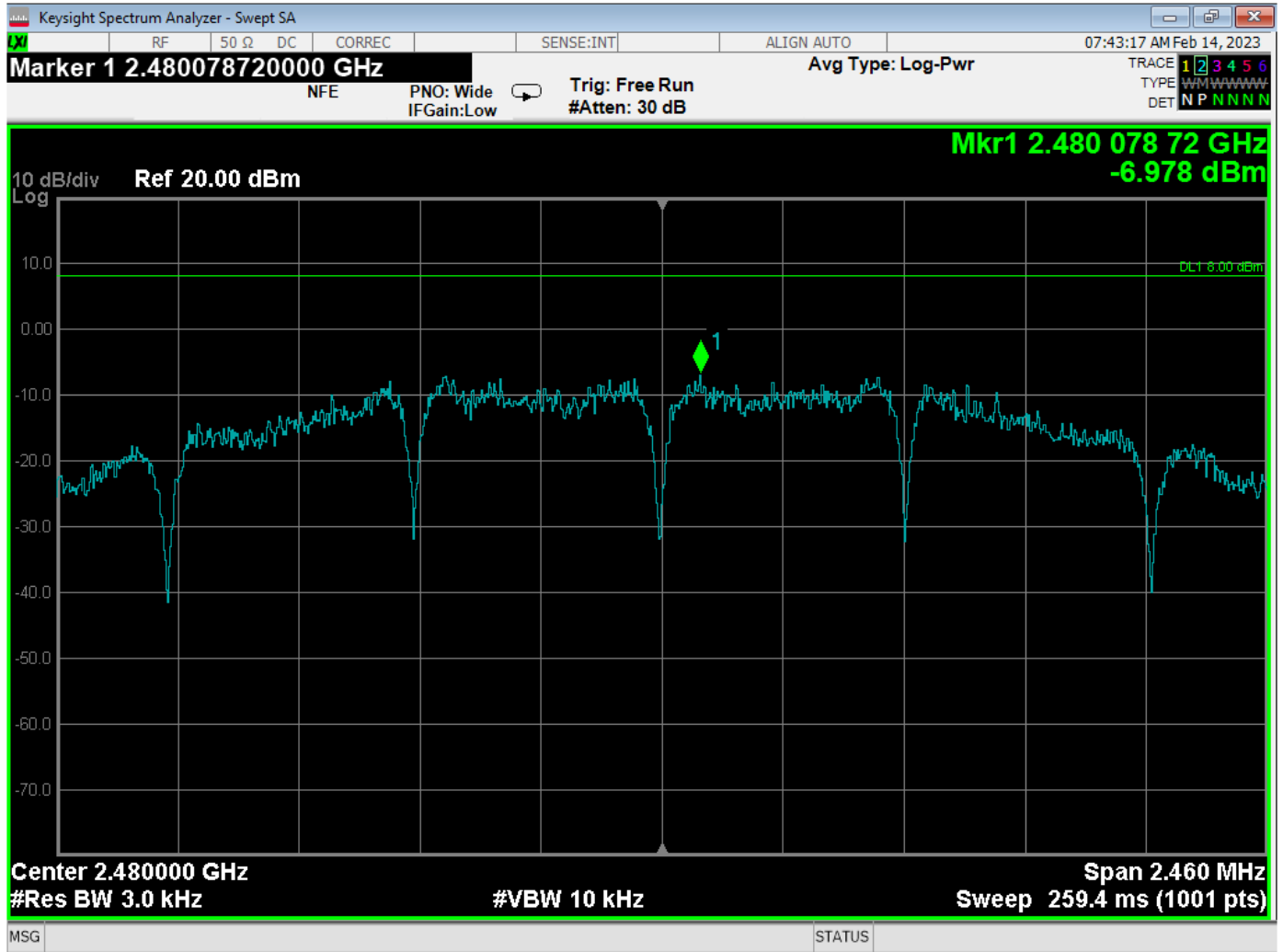
Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800

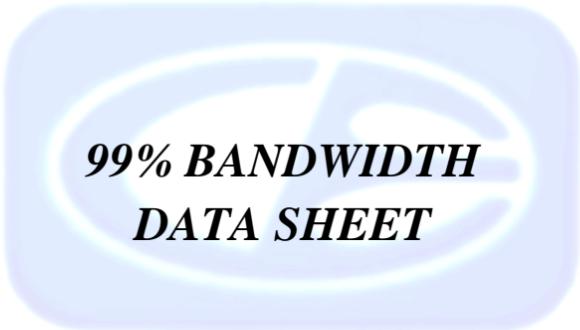


Peak Power Spectral Density - 2480 MHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



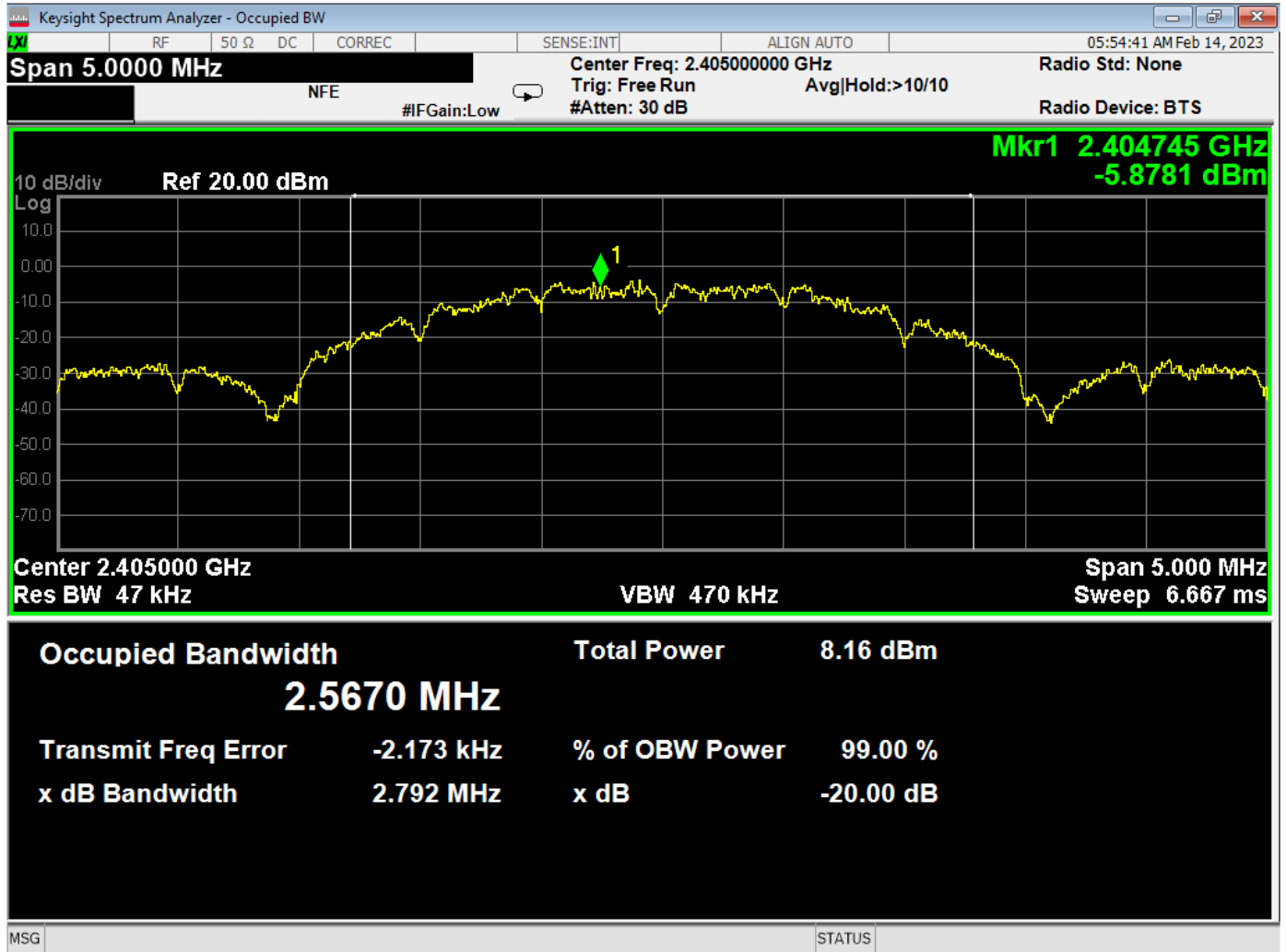
***99% BANDWIDTH
DATA SHEET***


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



Low Channel

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

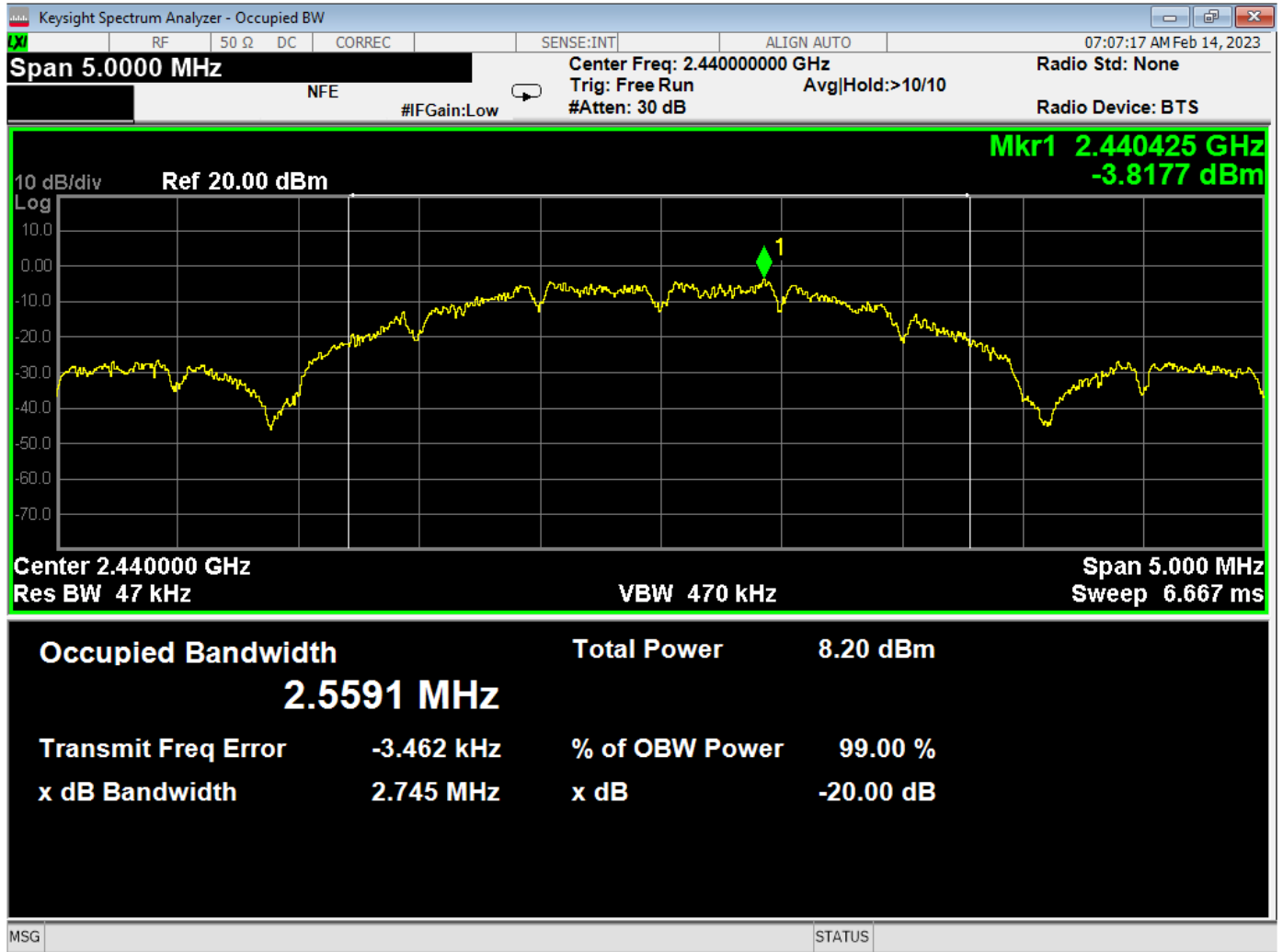


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



Mid Channel

Brea Division
 114 Olinda Drive
 Brea, CA 92823
 (714) 579-0500

Lake Forest Division
 20621 Pascal Way
 Lake Forest, CA 92630
 (949) 587-0400

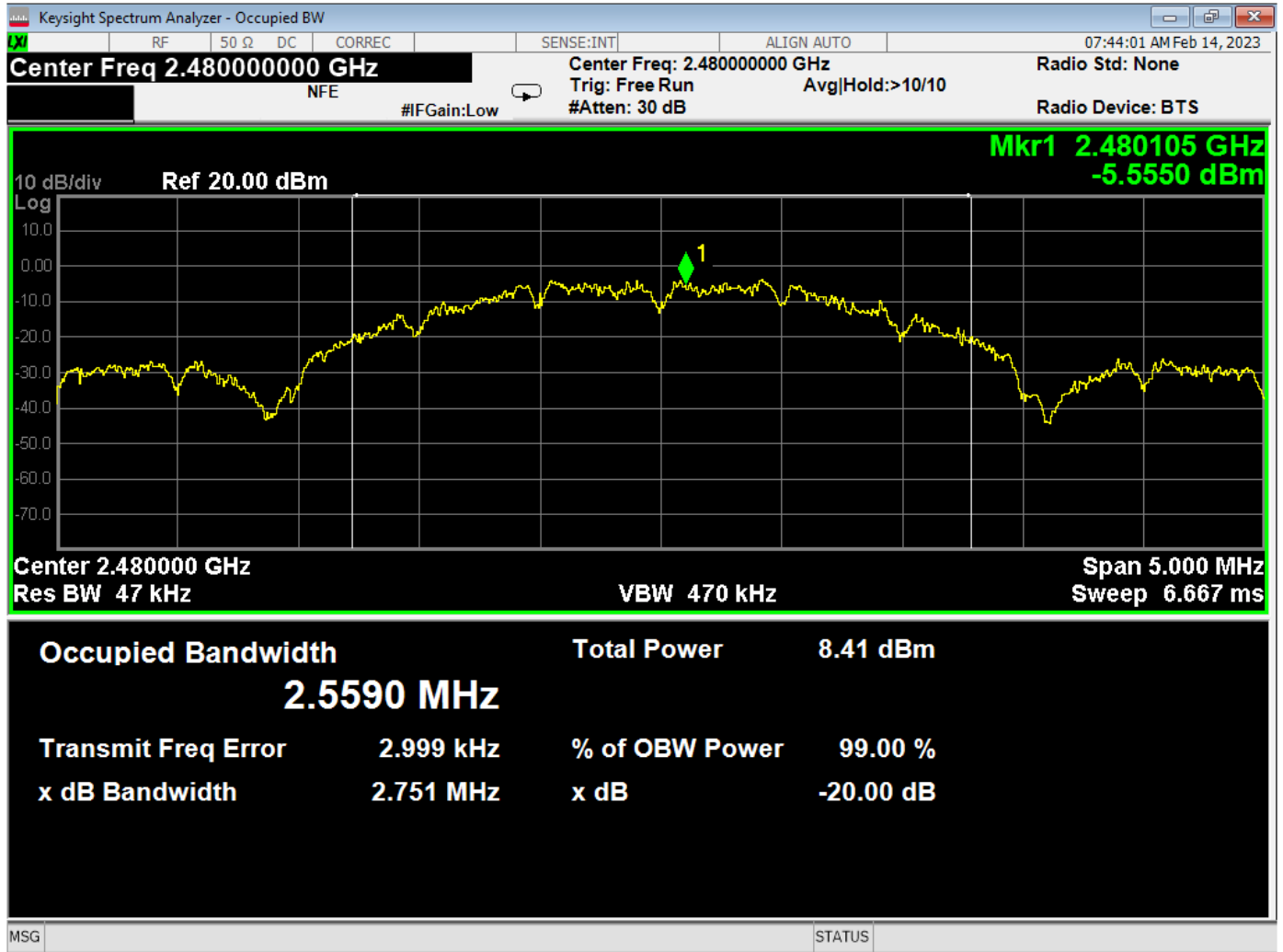
Newbury Park Division
 1050 Lawrence Drive
 Newbury Park, CA 91320
 (805) 480-4044


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



High Channel

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



***RF ANTENNA CONDUCTED
DATA SHEETS***

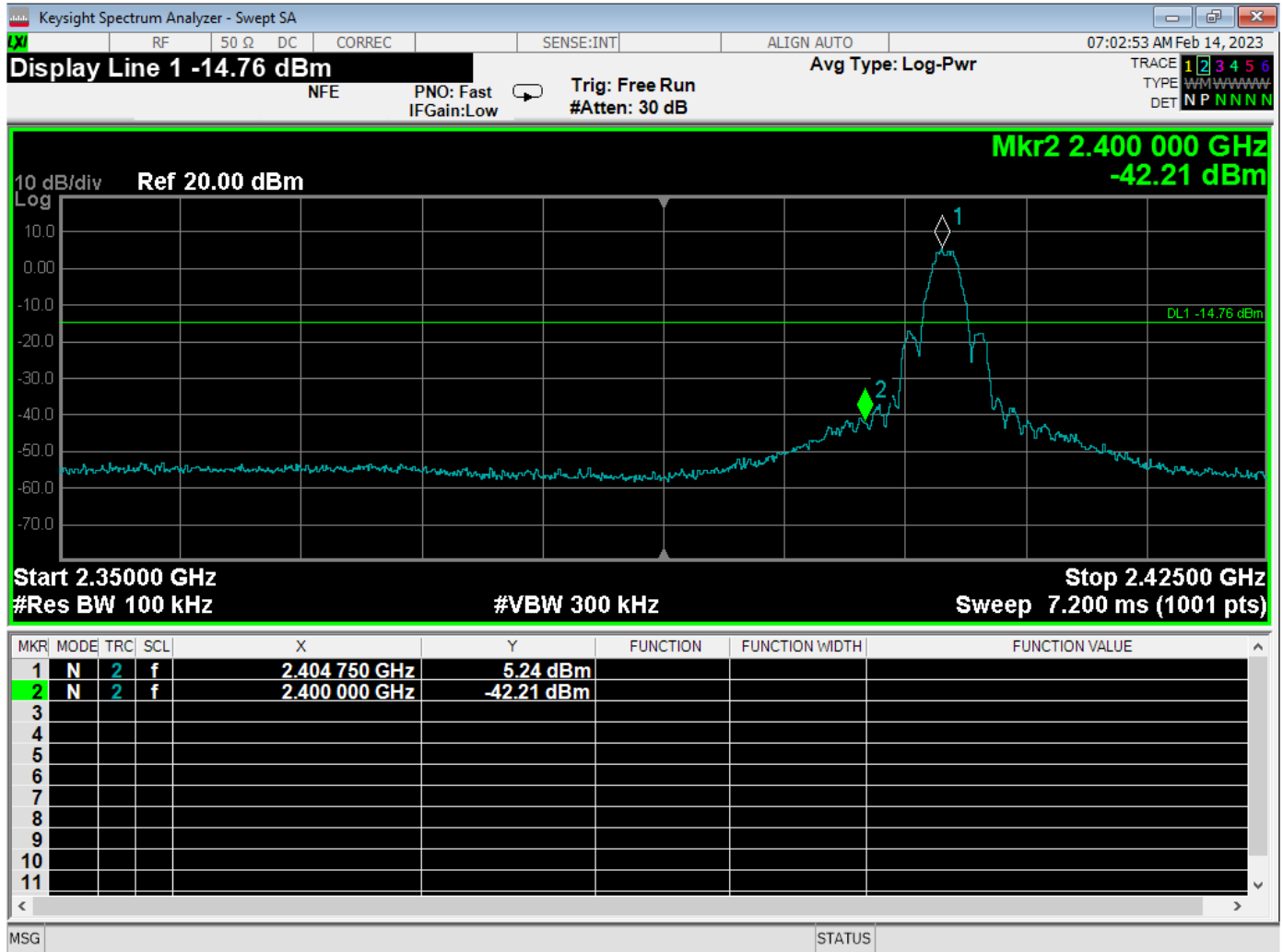


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



BE - 2400 MHz - Conducted

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

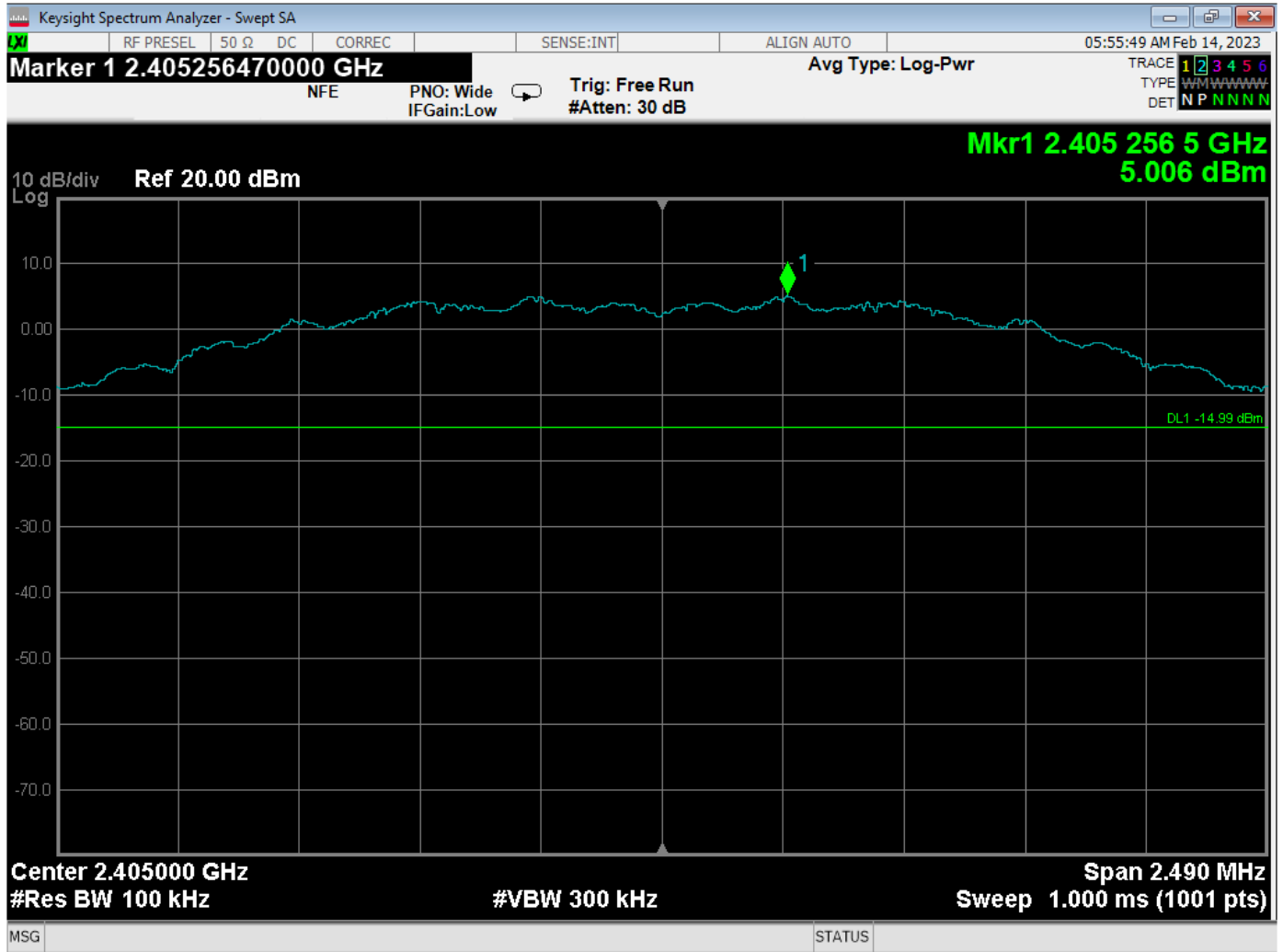


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



RF Antenna Conducted Test – Low Channel – Reference Level

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

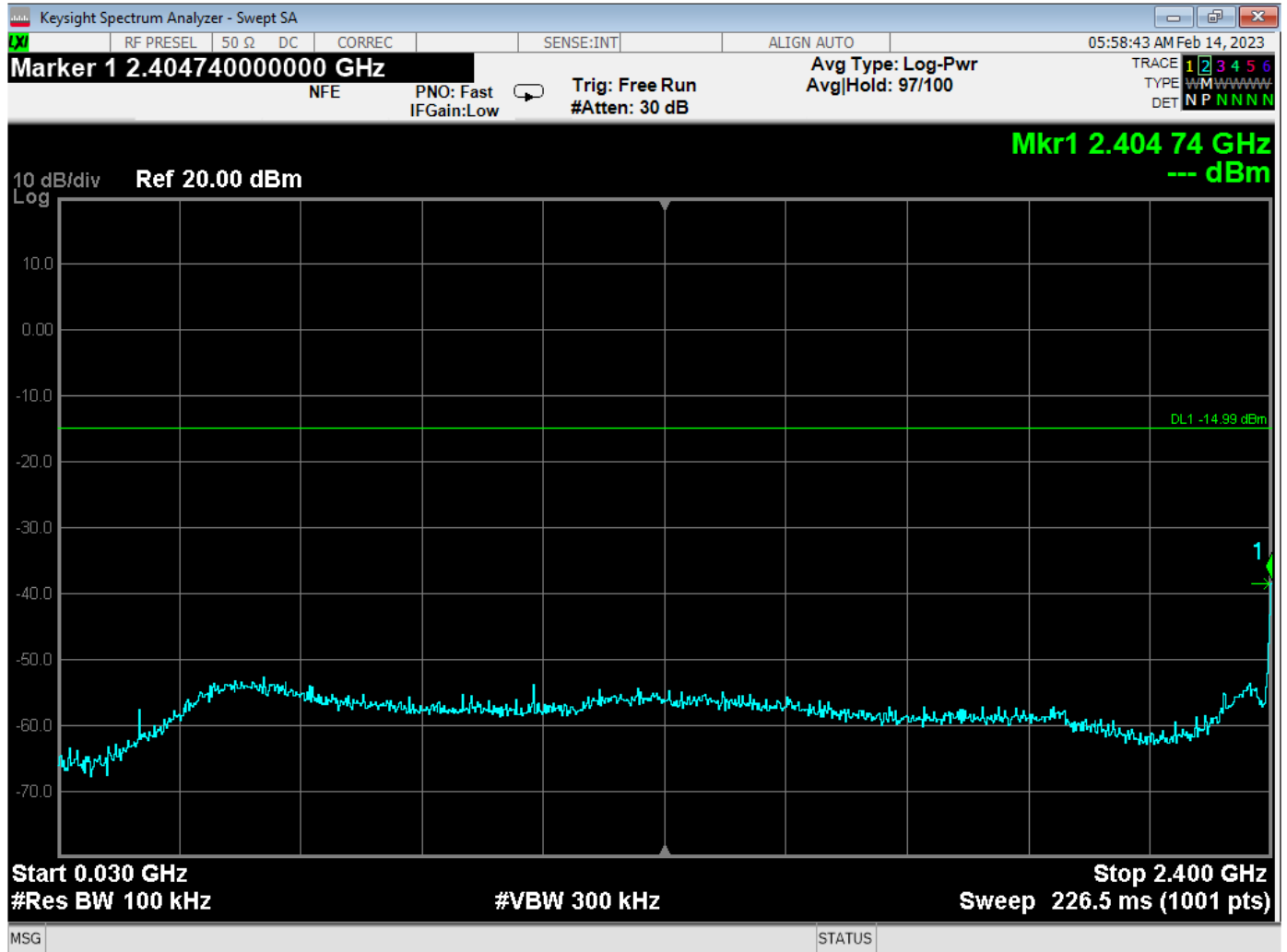


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



RF Antenna Conducted Test – Low Channel – 30 MHz to 2.4 GHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

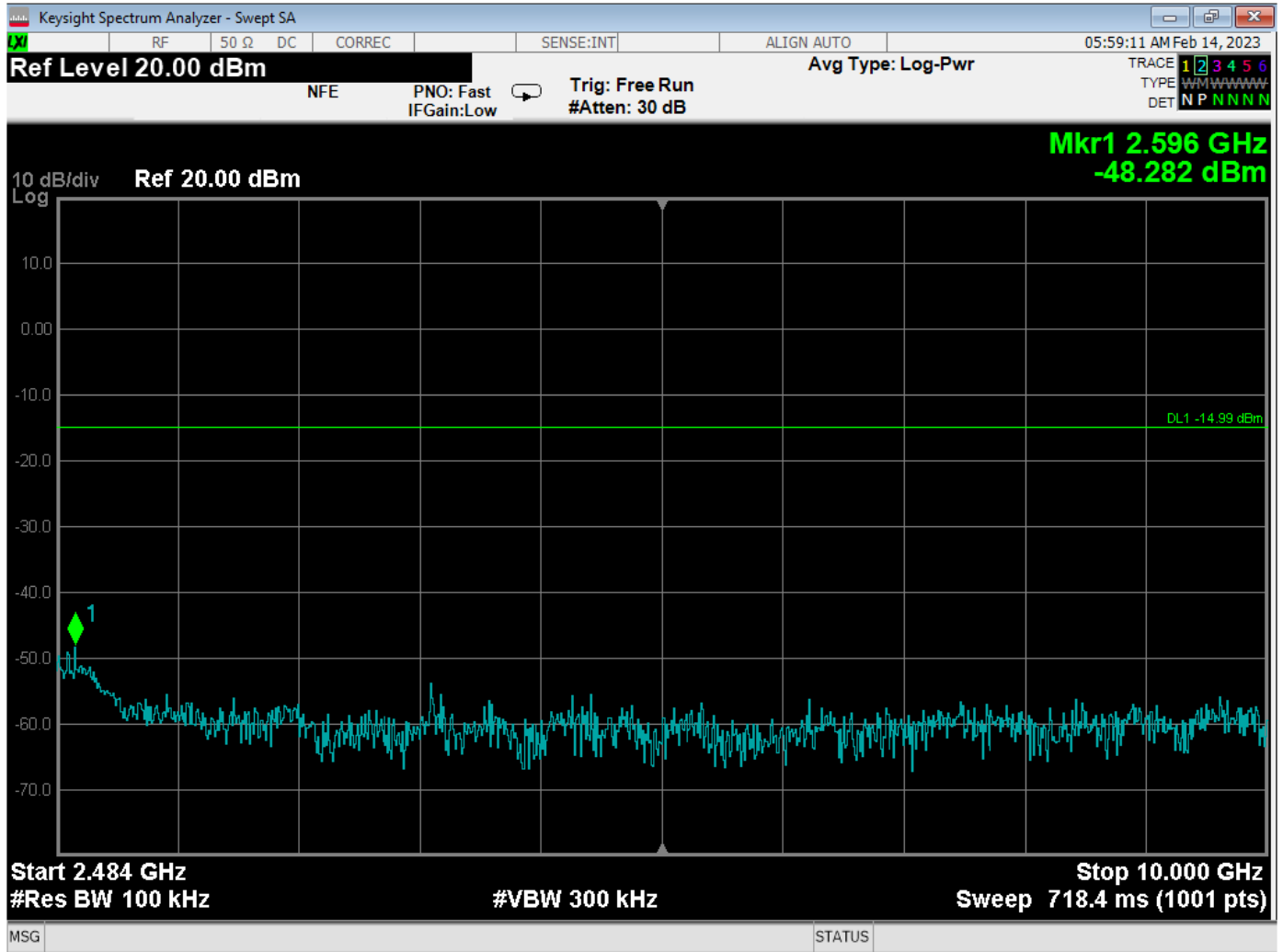


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



RF Antenna Conducted Test – Low Channel – 2484 MHz to 10 GHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

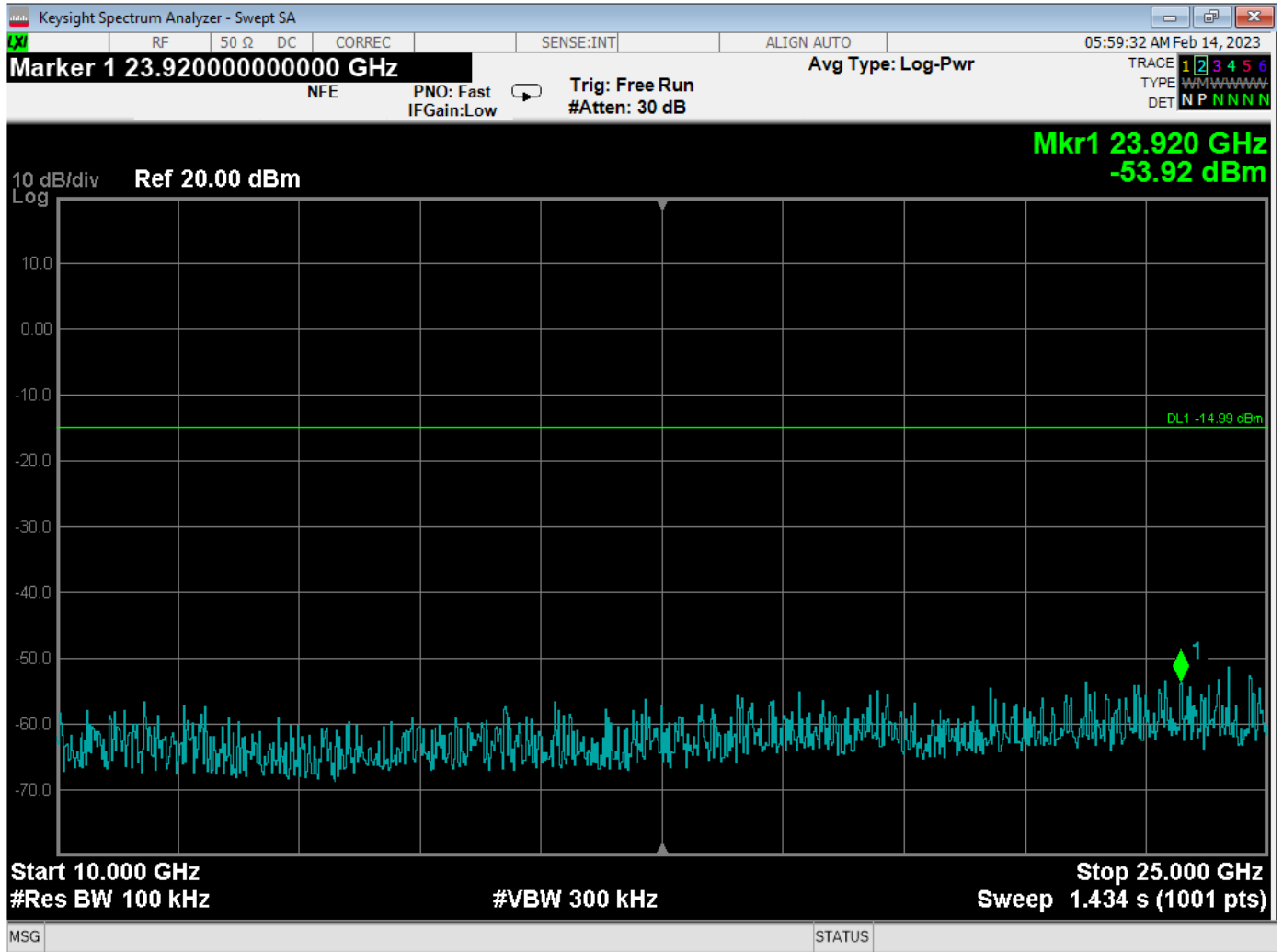


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



RF Antenna Conducted Test – Low Channel – 10 GHz to 25 GHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

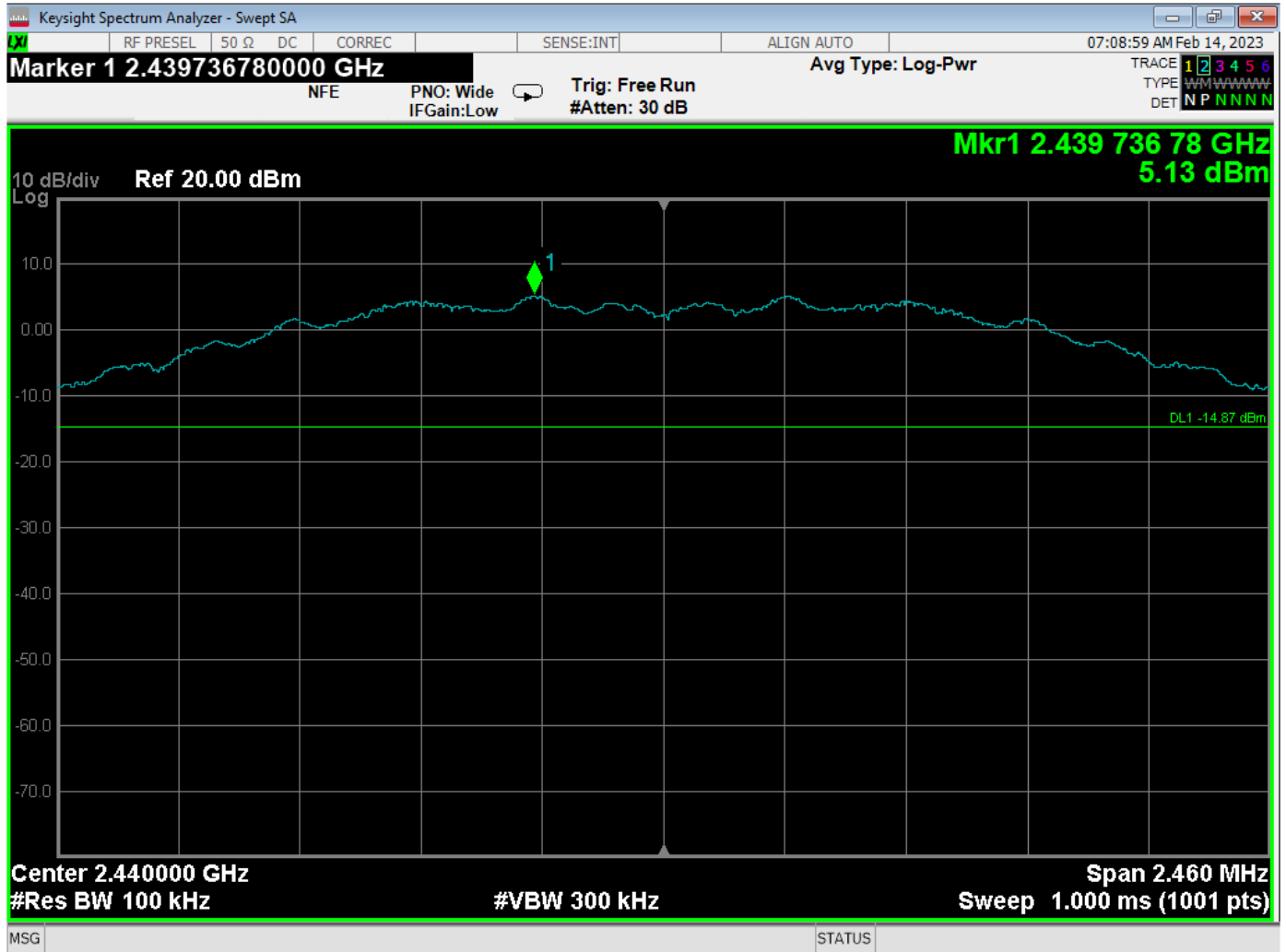


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



RF Antenna Conducted Test – Middle Channel – Reference Level

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

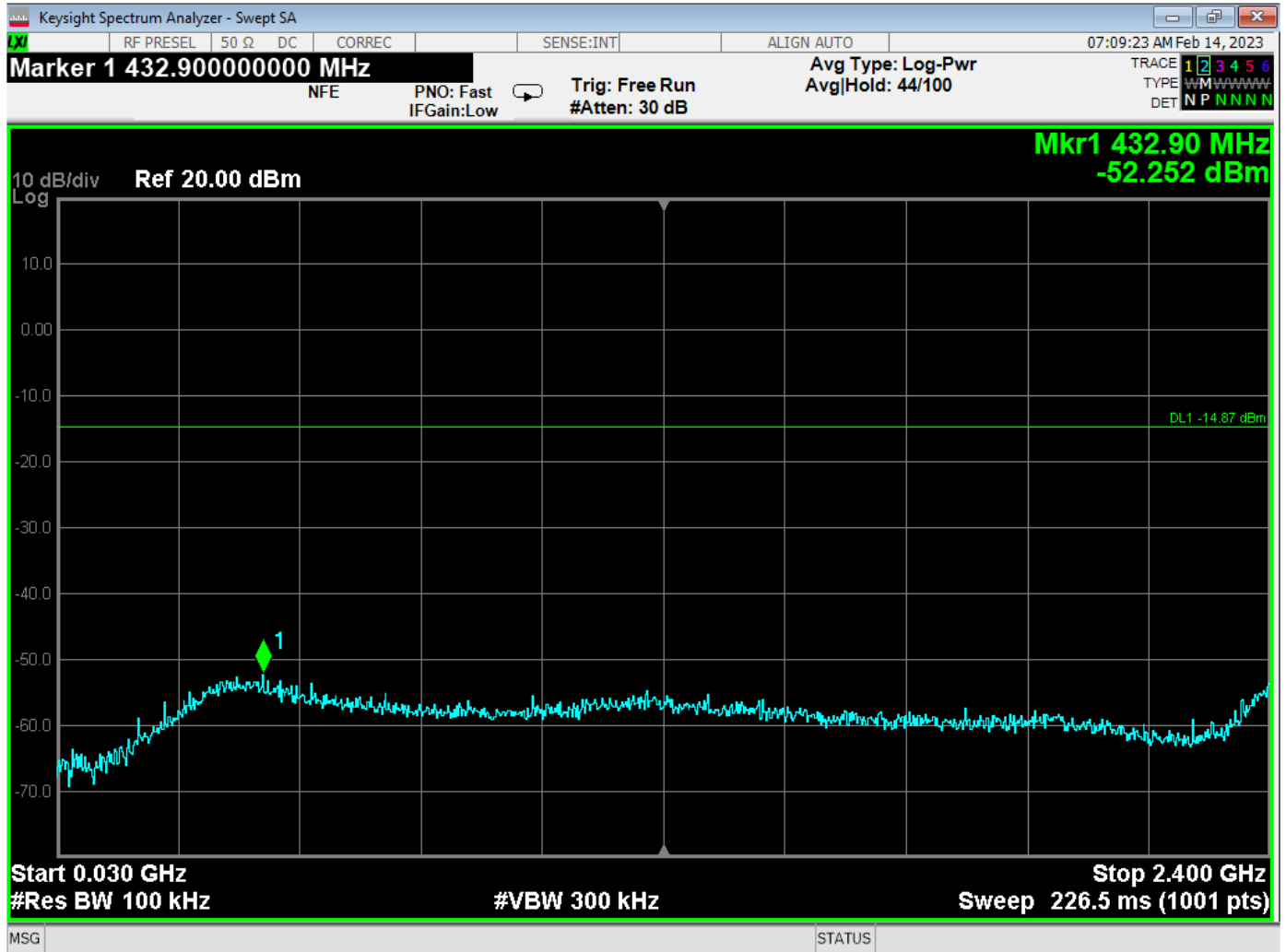


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



RF Antenna Conducted Test – Middle Channel – 30 MHz to 2.4 GHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

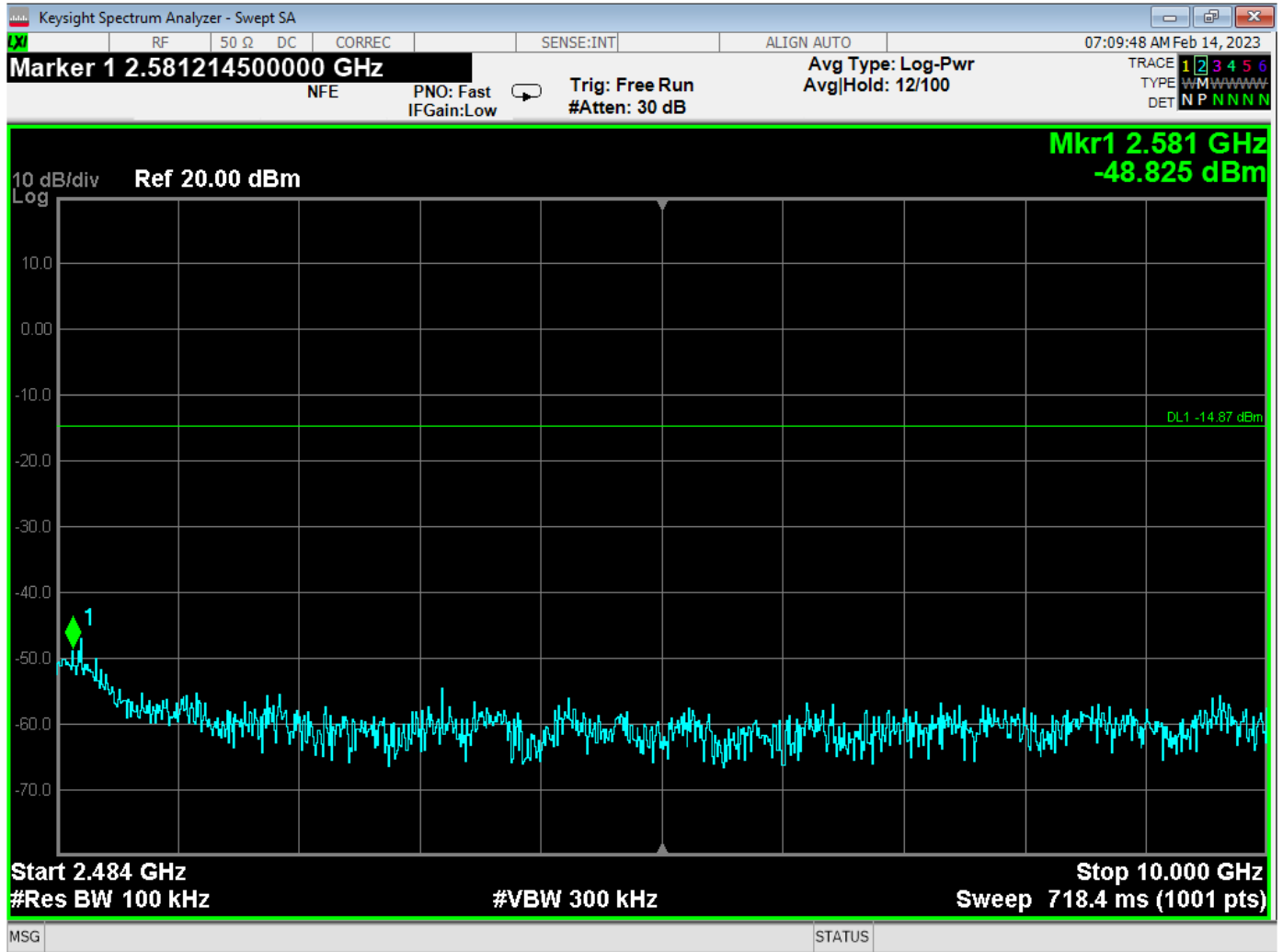


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



RF Antenna Conducted Test – Middle Channel – 2484 MHz to 10 GHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

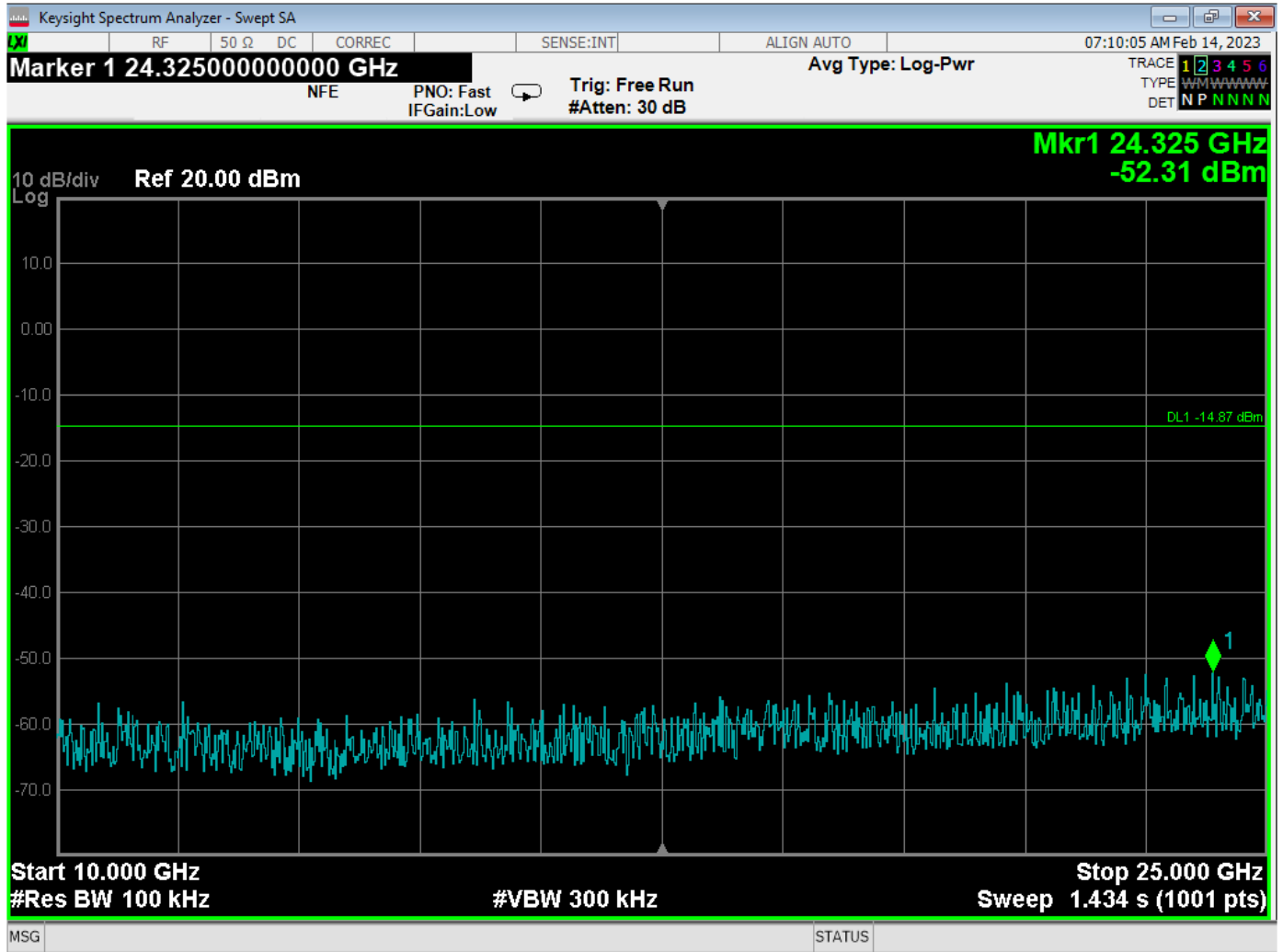


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



RF Antenna Conducted Test – Middle Channel – 10 GHz to 25 GHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

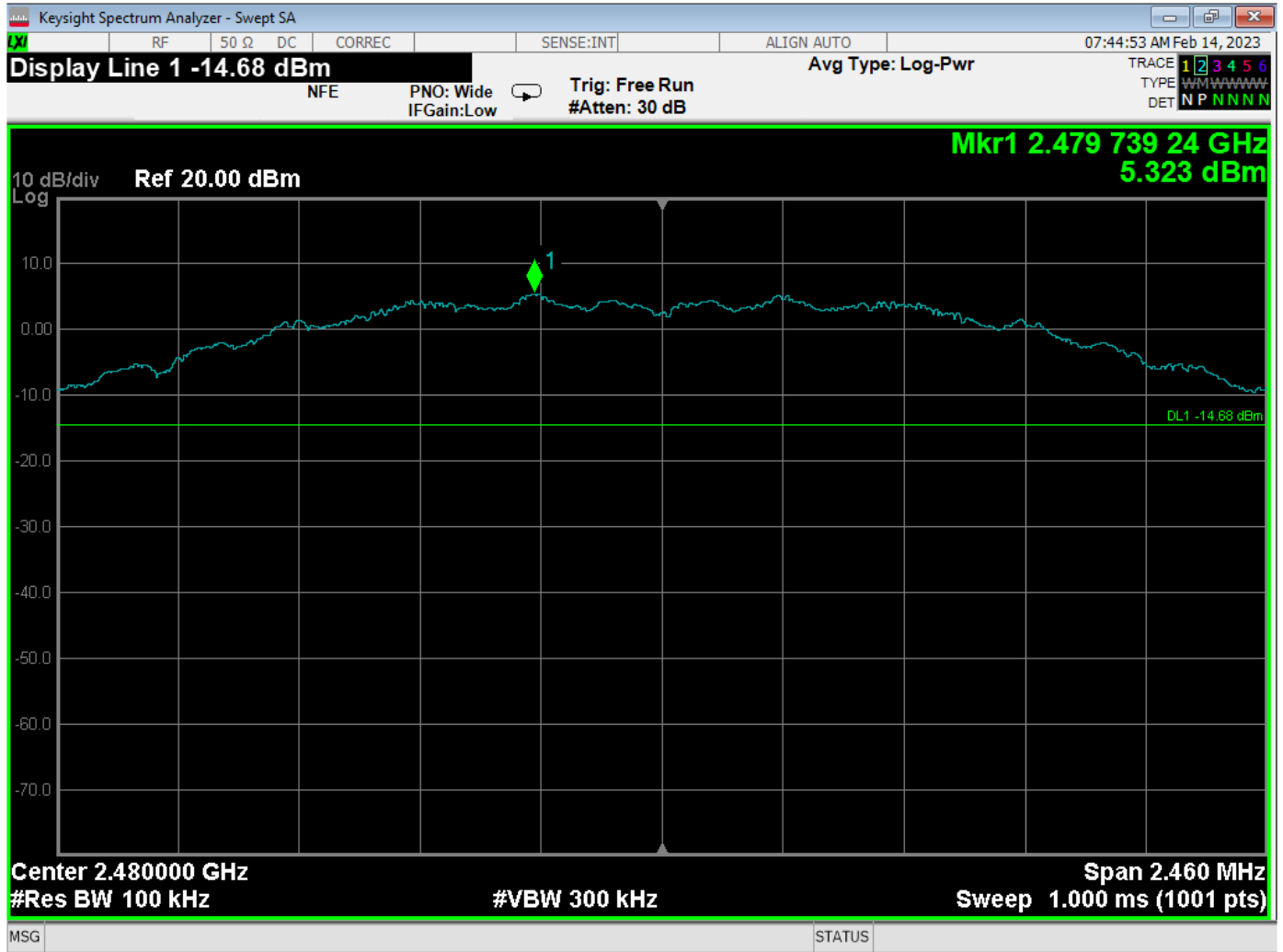


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



RF Antenna Conducted Test – High Channel – Reference Level

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

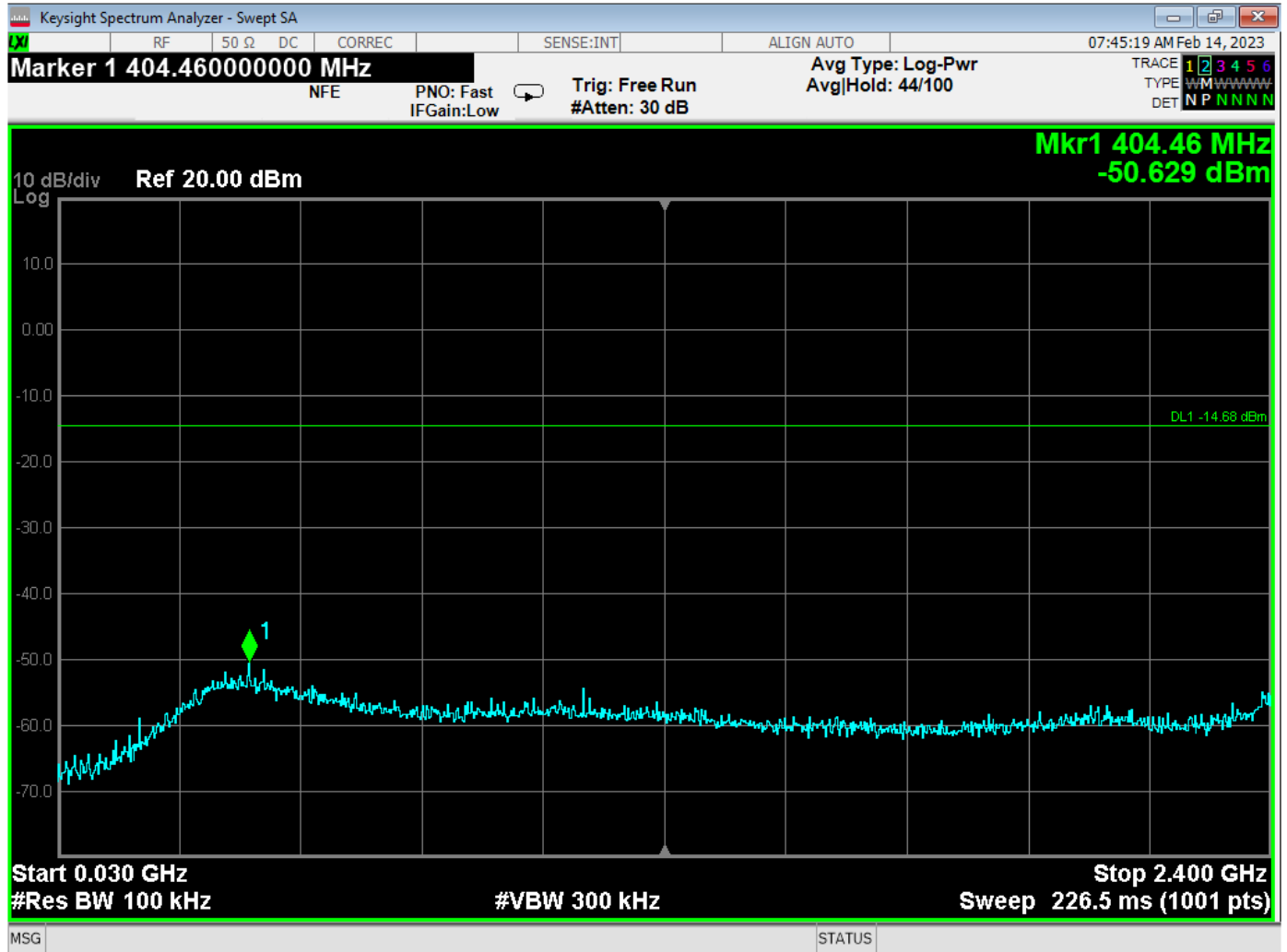


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



RF Antenna Conducted Test – High Channel – 30 MHz to 2.4 GHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

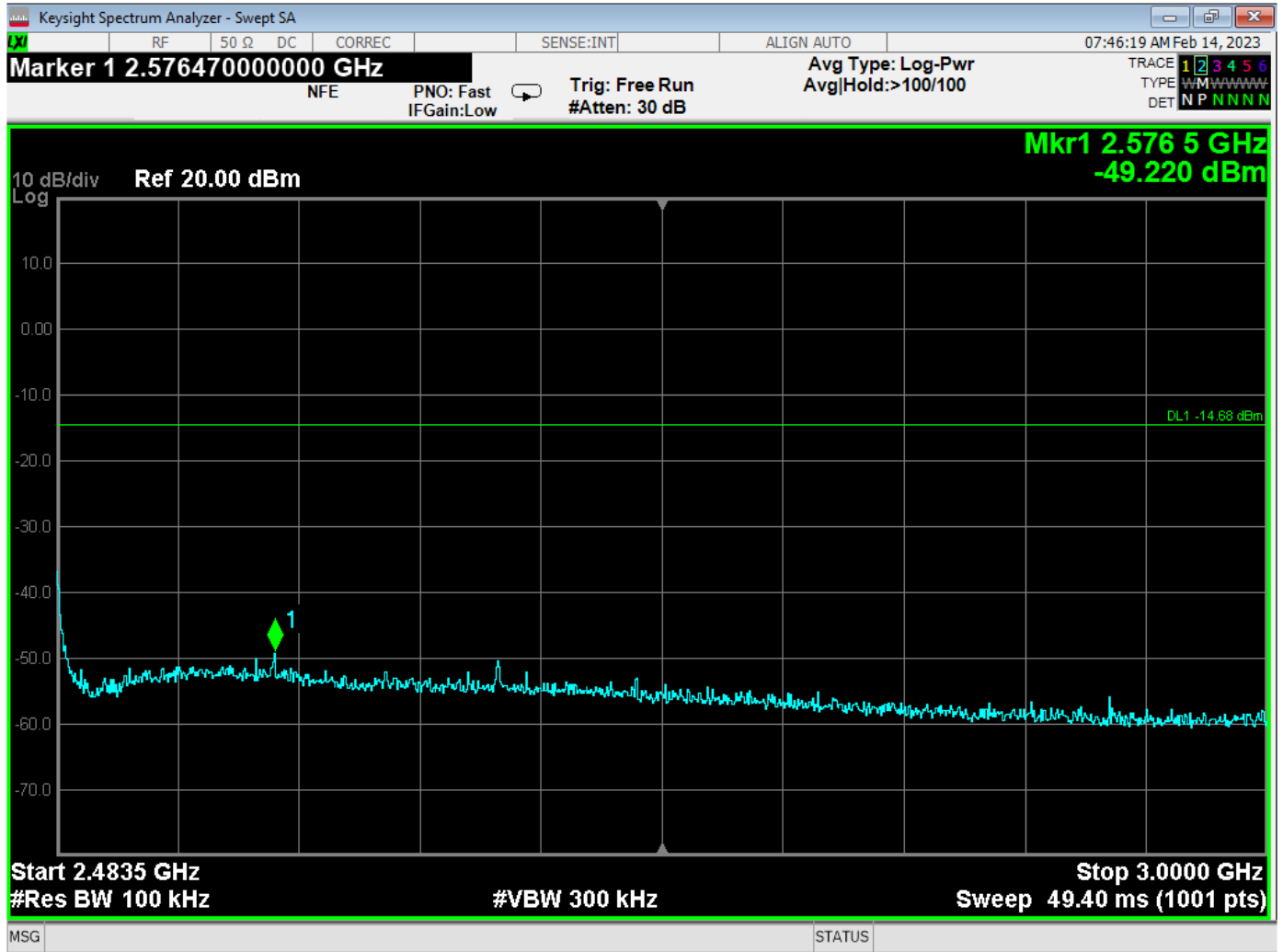


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



RF Antenna Conducted Test – High Channel – 2483.5 GHz to 3 GHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

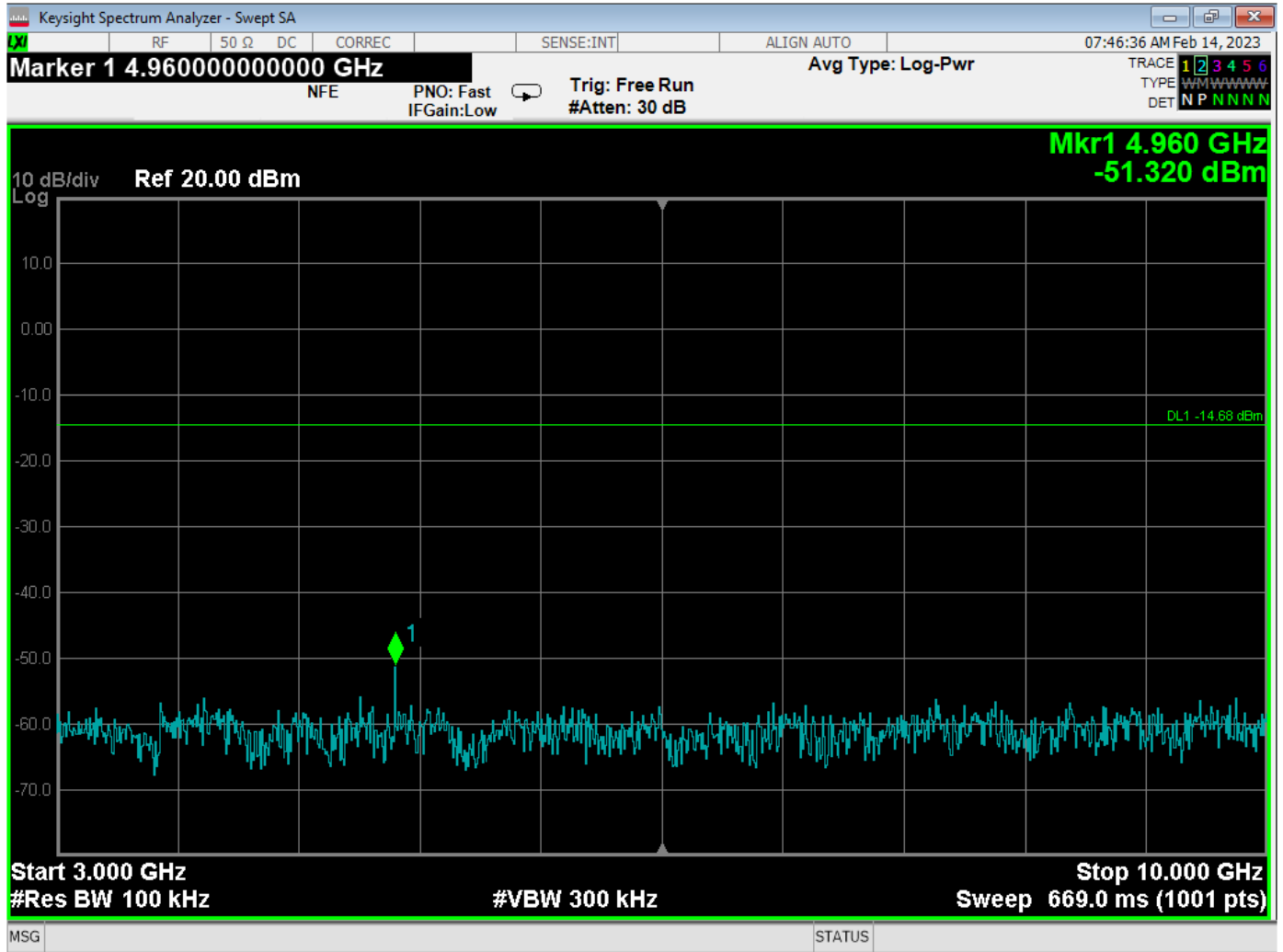


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



RF Antenna Conducted Test – High Channel – 3 MHz to 10 GHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044

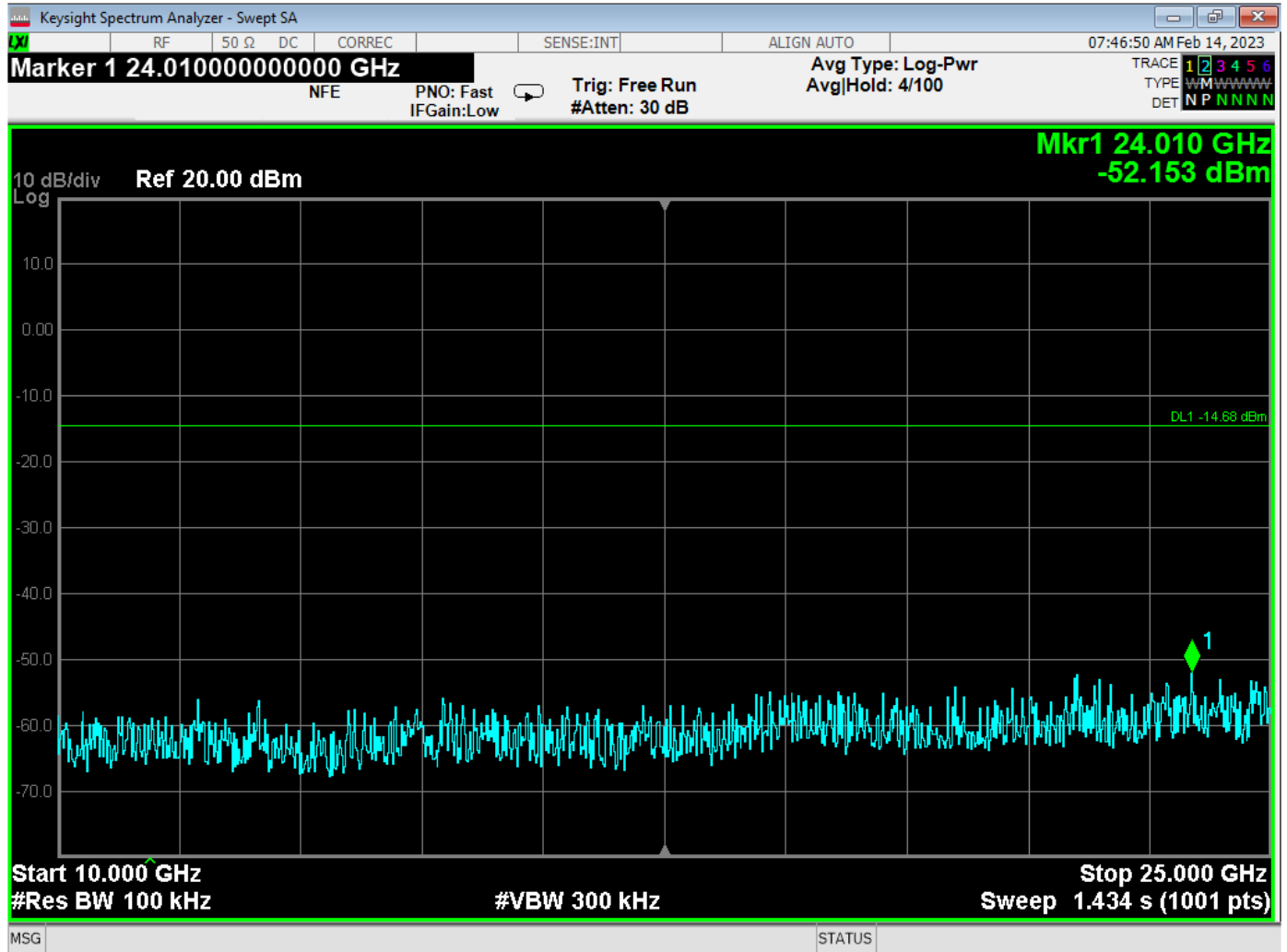


**COMPATIBLE
ELECTRONICS**

FCC Part 15 Subpart B and C; FCC Section 15.247; RSS-247; and RSS-GEN Test Report

Aida Thermostat and Aida Controller

Models: 6700 and 6800



RF Antenna Conducted Test – High Channel – 10 GHz to 25 GHz

Brea Division
114 Olinda Drive
Brea, CA 92823
(714) 579-0500

Lake Forest Division
20621 Pascal Way
Lake Forest, CA 92630
(949) 587-0400

Newbury Park Division
1050 Lawrence Drive
Newbury Park, CA 91320
(805) 480-4044



TELKONET, INC.

AIDA THERMOSTAT AND AIDA CONTROLLER

MODELS: 6700 AND 6800

EMISSIONS IN NON-RESTRICTED BANDS

FREQUENCY (MHz)	LEVEL (dBm)	Limit (dBm)	Margin (dB)
2596.00	-48.282	-14.99	-33.292
2581.00	-48.825	-14.87	-33.955
2576.50	-49.220	-14.68	-34.540

Note: The three highest non-restricted emissions are reported.