



element

Ademco, Inc.

Fuji Thermostat

FCC 15.407:2024

RSS-247 Issue 3:2023

RSS-Gen Issue 5:2018+A1:2019+A2:2021

Wi-Fi 802.11 a/b/g/n SISO Radio

Report: ADEM0044.5 Rev. 1, Issue Date: September 23, 2024



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CERTIFICATE OF TEST

Last Date of Test: September 23, 2024
Ademco, Inc.
EUT: Fuji Thermostat

Radio Equipment Testing

Standards

Specification	Method
FCC 15.407:2024	ANSI C63.10:2013
RSS-247 Issue 3:2023	
RSS-Gen Issue 5:2018+A1:2019+A2:2021	

Guidance

FCC KDB 789033 v02r01:2021

Results

Test Description	Result	FCC Section(s)	RSS Section(s)	ANSI C63.10 Section(s)	Comments
Powerline Conducted Emissions	Pass	15.407 (b)(6)	RSS-Gen 8.8	6.2	
Frequency Stability	Pass	15.407 (g)	RSS-Gen 3.2	6.8	
Duty Cycle	Pass	15.407 KDB 789033 -B	RSS-Gen 3.2	12.2	
Maximum Conducted Output Power	Pass	15.407(a)(1)-(4), KDB 789033 -E2.d	RSS-247 6.2.1.1, 6.2.2.1, 6.2.3.1, 6.2.4.1	12.3.2.4	
Equivalent Isotropic Radiated Power (EIRP)	Pass	15.407(a)(1)-(4), KDB 789033 -E2.d	RSS-247 6.2.1.1, 6.2.2.1, 6.2.3.1, 6.2.4.1	12.3.2.4	
Emission Bandwidth	Pass	15.407(a), KDB 789033 -C1	RSS-247 6.2.1.1, 6.2.2.1, 6.2.3.1	12.4.1	
Emission Bandwidth 5.8 GHz	Pass	15.407(e), KDB 789033 -C2	N/A	6.9.2	
Occupied Bandwidth	Pass	KDB 789033 -D	RSS-247 6.2.4.1	12.4.2	
Band Edge	Pass	15.407(h)(2)	RSS-247 6.2.1.2	12.4.2	
Maximum Power Spectral Density	Pass	15.407(a)(1)-(5), KDB 789033 -F	RSS-247 6.2.1.1, 6.2.2.1,	12.5	

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.

CERTIFICATE OF TEST

			6.2.3.1, 6.2.4.1		
Spurious Radiated Emissions	Pass	15.407 (b)(1)-(7), KDB 789033 -G	RSS-247 6.2.1.2, 6.2.2.2, 6.2.3.2, 6.2.4.2	12.7, 6.5, 6.6	
Measurement of Emission at Elevation Angles	N/A	KDB 789033 -H	RSS-247 6.2.2.3	KDB 789033 -H	Not required unless the EUT is a Master device used outdoors.
Maximum Power Spectral Density (EIRP)	Pass	N/A	RSS-247 6.2.1.1, 6.2.2.1, 6.2.3.1, 6.2.4.1	12.5	

Deviations From Test Standards

None

Approved By:



Trevor Buls, Principal EMC Test Engineer
Signed for and on behalf of Element

Product compliance is the responsibility of the client; therefore, the tests and equipment modes of operation represented in this report were agreed upon by the client, prior to testing. The results of this test pertain only to the sample(s) tested. The specific description is noted in each of the individual sections of the test report supporting this certificate of test. This report reflects only those tests from the referenced standards shown in the certificate of test. It does not include inspection or verification of labels, identification, marking or user information. As indicated in the Statement of Work sent with the quotation, Element's standard process is to always use the latest published version of the test methods even when earlier versions are cited in the test specification. Issuance of a purchase order was de facto acceptance of this approach. Otherwise, the client would have advised Element in writing of the specific version of the test methods they wanted applied to the subject testing.

REVISION HISTORY



Revision Number	Description	Date (yyyy-mm-dd)	Page Number
00	None		
01	Added MU, radiated band edge data, updated power settings table, removed some redundant data.	2024-09-20	12-13, 160-185

ACCREDITATIONS AND AUTHORIZATIONS



United States

FCC - Designated by the FCC as a Telecommunications Certification Body (TCB). Certification chambers, Open Area Test Sites, and conducted measurement facilities are listed with the FCC.

A2LA - Each laboratory is accredited by A2LA to ISO / IEC 17025, and as a product certifier to ISO / IEC 17065 which allows Element to certify transmitters to FCC and IC specifications.

Canada

ISED - Recognized by Innovation, Science and Economic Development Canada as a Certification Body (CB) and as a CAB for the acceptance of test data.

European Union

European Commission – Recognized as an EU Notified Body validated for the EMCD and RED Directives.

United Kingdom

BEIS – Recognized by the UK as an Approved Body under the UK Radio Equipment and UK EMC Regulations.

Australia/New Zealand

ACMA - Recognized by ACMA as a CAB for the acceptance of test data.

Korea

MSIT / RRA - Recognized by KCC's RRA as a CAB for the acceptance of test data.

Japan

VCCI - Associate Member of the VCCI. Conducted and radiated measurement facilities are registered.

Taiwan

BSMI – Recognized by BSMI as a CAB for the acceptance of test data.

NCC - Recognized by NCC as a CAB for the acceptance of test data.

Singapore

IDA – Recognized by IDA as a CAB for the acceptance of test data.

Israel

MOC – Recognized by MOC as a CAB for the acceptance of test data.

Hong Kong

OFCA – Recognized by OFCA as a CAB for the acceptance of test data.

Vietnam

MIC – Recognized by MIC as a CAB for the acceptance of test data.

SCOPE

For details on the Scopes of our Accreditations, please visit:

[California](#)

[Minnesota](#)

[Oregon](#)

[Texas](#)

[Washington](#)

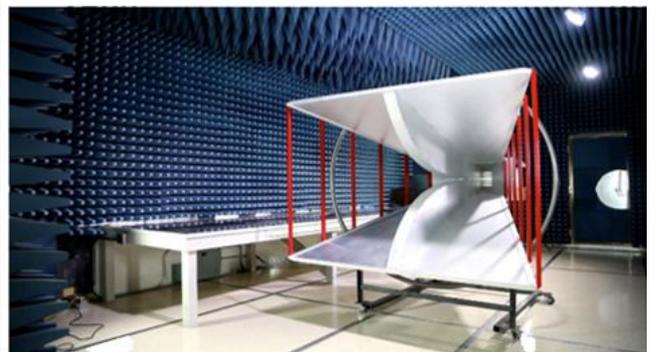
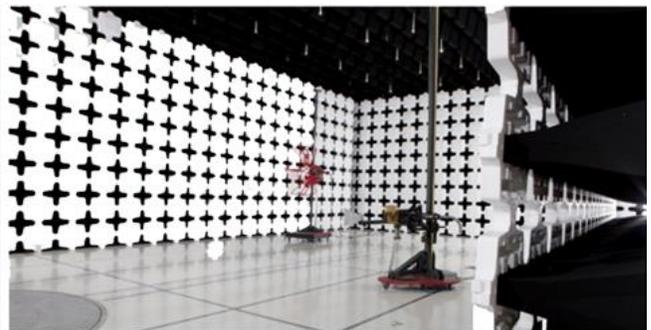
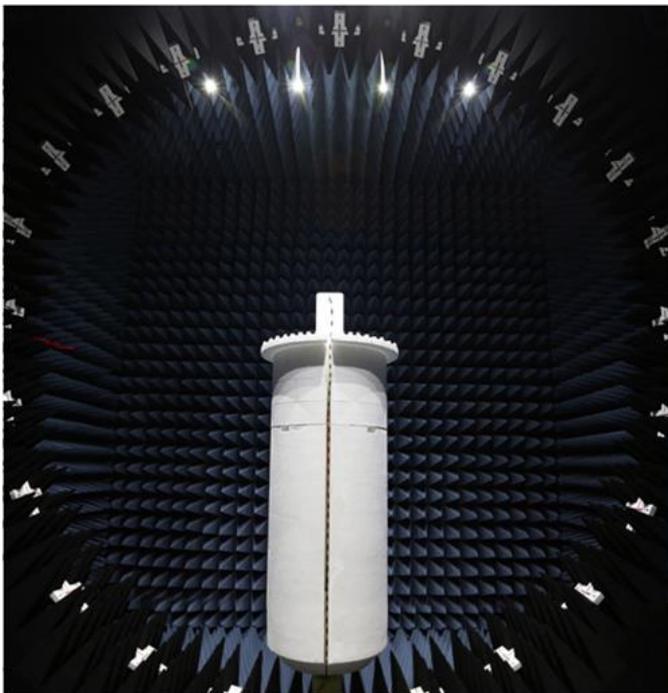
FACILITIES

Testing was performed at the following location(s)

Location	Labs ⁽¹⁾	Address	A2LA ⁽²⁾	ISED ⁽³⁾	BSMI ⁽⁴⁾	VCCI ⁽⁵⁾	CAB ⁽⁶⁾	FDA ⁽⁷⁾
<input type="checkbox"/> California	OC01-17	41 Tesla Irvine, CA 92618 (949) 861-8918	3310.04	2834B	SL2-IN-E-1154R	A-0029	US0158	TL-55
<input checked="" type="checkbox"/> Minnesota	MN01-11	9349 W Broadway Ave. Brooklyn Park, MN 55445 (612) 638-5136	3310.05	2834E	SL2-IN-E-1152R	A-0109	US0175	TL-57
<input type="checkbox"/> Oregon	EV01-12	6775 NE Evergreen Pkwy #400 Hillsboro, OR 97124 (503) 844-4066	3310.02	2834D	SL2-IN-E-1017	A-0108	US0017	TL-56
<input type="checkbox"/> Plano Texas	PT01-15	1701 E Plano Pkwy, Ste 150 Plano, TX 75074 (972) 509-2566	214.19	32637	SL2-IN-E-057R	A-0426	US0054	N/A
<input type="checkbox"/> Texas	TX01-09	3801 E Plano Pkwy Plano, TX 75074 (469) 304-5255	3310.03	2834G	SL2-IN-E-1158R	N/A	US0191	TL-54
<input type="checkbox"/> Washington	NC01-05	19201 120th Ave NE Bothell, WA 98011 (425) 984-6600	3310.06	2834F	SL2-IN-E-1153R	A-0110	US0157	TL-67
<input type="checkbox"/> Offsite	N/A	See Product Description	N/A	N/A	N/A	N/A	N/A	N/A

See data sheets for specific labs

- (1) The lab designations denote individual rooms within each location. (OC01, OC02, OC03, etc.)
- (2) A2LA Certificate No.
- (3) ISED Company No.
- (4) BSMI No.
- (5) VCCI Site Filing No.
- (6) CAB Identifier. Recognized Phase I CAB for ISED, ACMA, BSMI, IDA, KCC/RRA, MIC, MOC, NCC, OFCA
- (7) FDA ASCA No.



MEASUREMENT UNCERTAINTY



Measurement Uncertainty

When a measurement is made, the result will be different from the true or theoretically correct value. The difference is the result of tolerances in the measurement system that cannot be completely eliminated. To the extent that technology allows us, it has been our aim to minimize this error. Measurement uncertainty is a statistical expression of measurement error qualified by a probability distribution.

A measurement uncertainty estimation has been performed for each test per our internal quality document QM205.4.6. The estimation is used to compare the measured result with its "true" or theoretically correct value. The expanded measurement uncertainty (k=2) can be found in the table below. A lab specific value may also be found in the applicable test description section. Our measurement data meets or exceeds the measurement uncertainty requirements of the applicable specification; therefore, the test data can be compared directly to the specification limit to determine compliance. The calculations for estimating measurement uncertainty are based upon ETSI TR 100 028 (or CISPR 16-4-2 as applicable) and are available upon request.

The following table represents the Measurement Uncertainty (MU) budgets for each of the tests that may be contained in this report.

Various Measurements

Test	All Labs (+/-)
Frequency Accuracy (%)	0.0007
Amplitude Accuracy (dB)	1.2
Conducted Power (dB)	1.2
Radiated Power via Substitution (dB)	0.7
Temperature (degrees C)	0.7
Humidity (% RH)	2.5
Voltage (AC) (%)	1
Voltage (DC) (%)	0.7

Field Strength Measurements (dB)

Range	MN05 (+/-)	MN09 (+/-)
10kHz-30MHz	1.8	1.8
30MHz-1GHz 3m	4.6	4.7
1GHz-6GHz	5.1	5.1
6GHz-40GHz	5.2	5.2

AC Powerline Conducted Emissions Measurements (dB)

Range	MN03 (+/-)
9kHz-150kHz LISN	3.6
150kHz-30MHz LISN	3.2
150kHz-30MHz CVP	3.0
150kHz-30MHz Telecom-ISN	4.4

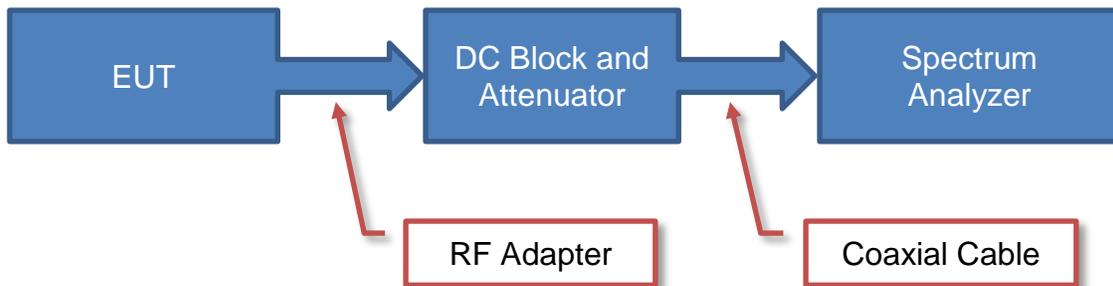
TEST SETUP BLOCK DIAGRAMS

Measurement Bandwidths

Frequency Range (MHz)	Peak Data (kHz)	Quasi-Peak Data (kHz)	Average Data (kHz)
0.01 - 0.15	1.0	0.2	0.2
0.15 - 30.0	10.0	9.0	9.0
30.0 - 1000	100.0	120.0	120.0
Above 1000	1000.0	N/A	1000.0

Unless otherwise stated, measurements were made using the bandwidths and detectors specified. No video filter was used.

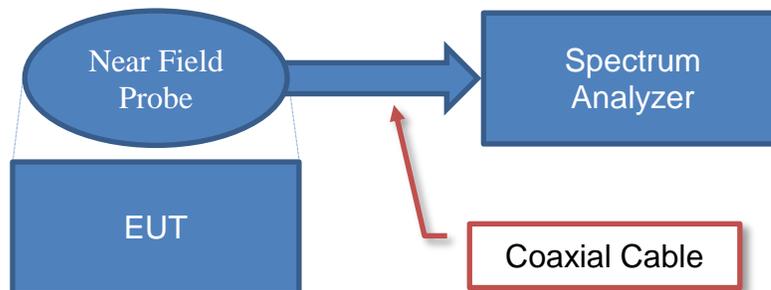
Antenna Port Conducted Measurements



Sample Calculation (logarithmic units)

$$\begin{array}{r}
 \text{Measured Value} \\
 71.2
 \end{array}
 =
 \begin{array}{r}
 \text{Measured Level} \\
 42.6
 \end{array}
 +
 \begin{array}{r}
 \text{Reference Level Offset} \\
 28.6
 \end{array}$$

Near Field Test Fixture Measurements

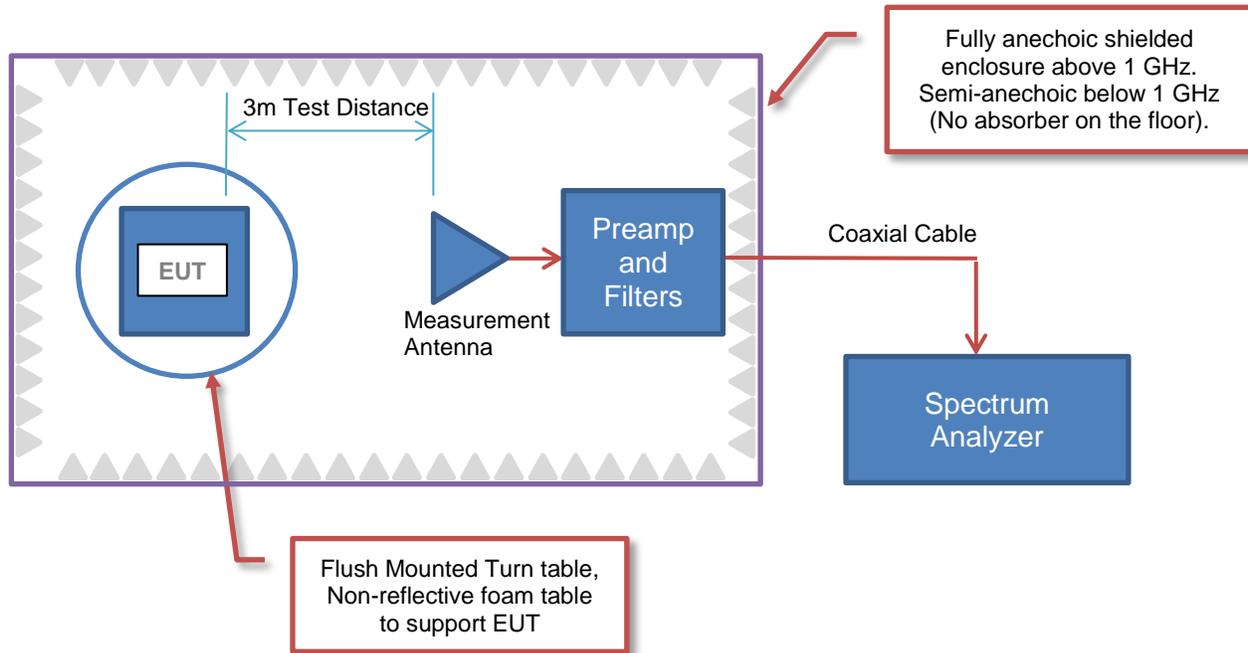


Sample Calculation (logarithmic units)

$$\begin{array}{r}
 \text{Measured Value} \\
 71.2
 \end{array}
 =
 \begin{array}{r}
 \text{Measured Level} \\
 42.6
 \end{array}
 +
 \begin{array}{r}
 \text{Reference Level Offset} \\
 28.6
 \end{array}$$

TEST SETUP BLOCK DIAGRAMS

Emissions Measurements



Sample Calculation (logarithmic units)

Radiated Emissions:

Measured Level (Amplitude)	Factor			Distance Adjustment Factor	External Attenuation	Field Strength
	Antenna Factor	Cable Factor	Amplifier Gain			
42.6	28.6	3.1	40.8	0.0	0.0	33.5

42.6 + 28.6 + 3.1 - 40.8 + 0.0 + 0.0 = 33.5

Conducted Emissions:

Measured Level (Amplitude)	Factor		External Attenuation	Adjusted Level
	Transducer Factor	Cable Factor		
26.7	0.3	0.1	20.0	47.1

26.7 + 0.3 + 0.1 + 20.0 = 47.1

Radiated Power (ERP/EIRP) – Substitution Method:

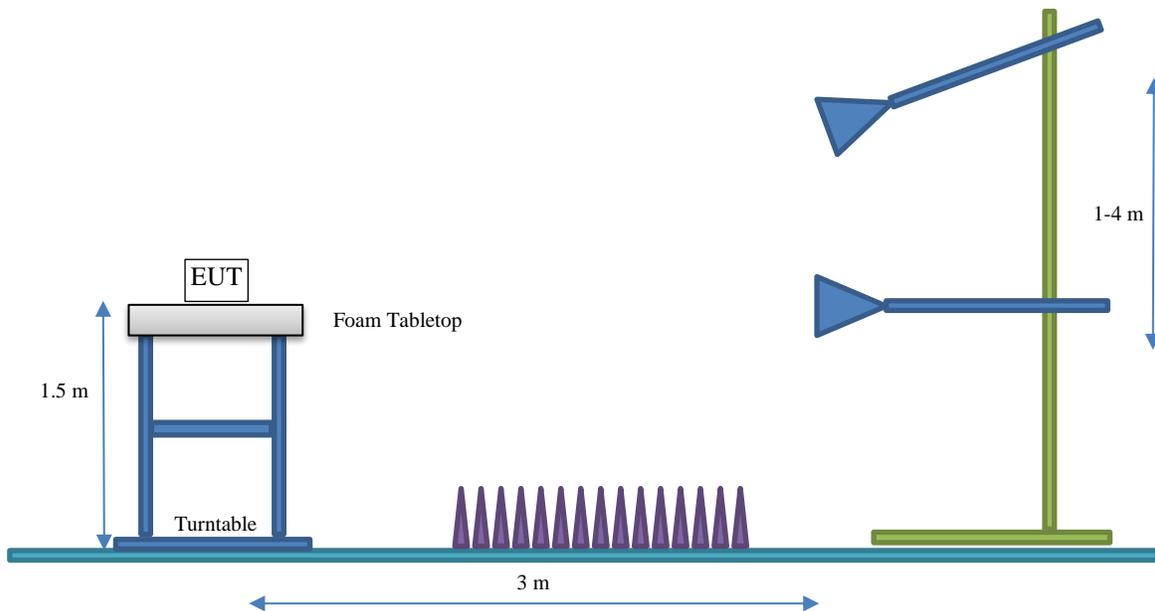
Measured Level into Substitution Antenna (Amplitude dBm)	Substitution Antenna Factor (dBi)	EIRP to ERP (if applicable)	Measured power (dBm ERP/EIRP)
10.0	6.0	2.15	13.9/16.0

10.0 + 6.0 - 2.15 = 13.9/16.0

TEST SETUP BLOCK DIAGRAMS

Bore Sighting (>1GHz)

The diameter of the illumination area is the dimension of the line tangent to the EUT formed by 3 dB beamwidth of the measurement antenna at the measurement distance. At a 3 meter test distance, the diameter of the illumination area was 3.8 meters at 1 GHz and greater than 2.1 meters up to 6 GHz. Above 1 GHz, when required by the measurement standard, the antenna is pointed for both azimuth and elevation to maintain the receive antenna within the cone of radiation from the EUT. The specified measurement detectors were used for comparison of the emissions to the peak and average specification limits.



PRODUCT DESCRIPTION

Client and Equipment under Test (EUT) Information

Company Name:	Ademco, Inc.
Address:	251 Little Falls Drive
City, State, Zip:	Wilmington, DE 19808
Test Requested By:	Christian Fouth
EUT:	Fuji Thermostat
First Date of Test:	July 23, 2024
Last Date of Test:	September 23, 2024
Receipt Date of Samples:	July 23, 2024
Equipment Design Stage:	Prototype
Equipment Condition:	No Damage
Purchase Authorization:	Verified

Information Provided by the Party Requesting the Test

Functional Description of the EUT:

Fuji is a Wi-Fi (802.11 a/b/g/n 1x1, 2.4GHz & 5GHz)/BLE 5.0 enabled thermostat with only one antenna.

Testing Objective:

To demonstrate compliance of the Wi-Fi 802.11 a/b/g/n SISO radio under FCC 15.407 for operation in the 5.2 GHz, 5.3 GHz, 5.6 GHz and 5.8 GHz band(s).

POWER SETTINGS AND ANTENNAS



The power settings, antenna gain value(s) and cable loss (if applicable) used for the testing contained in this report were provided by the customer and will affect the validity of the results. Element assumes no responsibility for the accuracy of this information. The power settings below reflect the maximum power that the EUT is allowed to transmit at during normal operation.

ANTENNA GAIN (dBi)

Type	Provided by:	Frequency Range (MHz)	Gain (dBi)
PCB Trace	Ademco	5150-5850	2.2

The EUT was tested using the power settings provided by the manufacturer which were based upon:

- Test software settings
- Rated power settings

Software / firmware used for testing:

Radio module: XTR v2.4.3.0

Renesas micro: FujiX2S_XTR_En_BLE_F11 v00.01.14.99

SETTINGS FOR ALL TESTS IN THIS REPORT

Modulation Types	Channel Bandwidths (MHz)	Band	Channel Position (20 MHz Ch.)	Frequency Range (MHz)	Power Setting
6 Mbps 36 Mbps 54 Mbps MCS0 MCS7	20	UNII 1	Low (36)	5150-5250	107 (this setting was based on a test software setting instead of default which is based on rated power)
6 Mbps	20	UNII 1	Mid (40), High (48)	5150-5250	Mid:17 High:18
36 Mbps	20	UNII 1	Mid (40), High (48)	5150-5250	Mid:15 High:15
54 Mbps	20	UNII 1	Mid (40), High (48)	5150-5250	Mid:14 High:14
MCS0	20	UNII 1	Mid (40), High (48)	5150-5250	Mid:16 High:16
MCS7	20	UNII 1	Mid (40), High (48)	5150-5250	Mid:13 High:13
6 Mbps	20	UNII 2A	Low (52), Mid (60), High (64)	5250-5350	Low:18 Mid:17 High:16
36 Mbps	20	UNII 2A	Low (52), Mid (60), High (64)	5250-5350	Low:15 Mid:15 High:15
54 Mbps	20	UNII 2A	Low (52), Mid (60), High (64)	5250-5350	Low:14 Mid:14 High:14
MCS0	20	UNII 2A	Low (52), Mid (60), High (64)	5250-5350	Low:16 Mid:16 High:15.5
MCS7	20	UNII 2A	Low (52), Mid (60), High (64)	5250-5350	Low:13 Mid:13 High:13
6 Mbps	20	UNII 2C	Low (100), Mid (116), High (140)	5470-5725	Low:16.5 Mid:16.5 High:14
36 Mbps	20	UNII 2C	Low (100), Mid (116), High (140)	5470-5725	Low:15 Mid:15 High:14

POWER SETTINGS AND ANTENNAS



54 Mbps	20	UNII 2C	Low (100), Mid (116), High (140)	5470-5725	Low:14 Mid:14 High:14
MCS0	20	UNII 2C	Low (100), Mid (116), High (140)	5470-5725	Low:16 Mid:16 High:14.5
MCS 7	20	UNII 2C	Low (100), Mid (116), High (140)	5470-5725	Low:13 Mid:13 High:13
6 Mbps	20	UNII 3	Low (149), Mid (157), High (165)	5725-5850	Low:18 Mid:18 High:18
36 Mbps	20	UNII 3	Low (149), Mid (157), High (165)	5725-5850	Low:15 Mid:15 High:15
54 Mbps	20	UNII 3	Low (149), Mid (157), High (165)	5725-5850	Low:14 Mid:14 High:14
MCS0	20	UNII 3	Low (149), Mid (157), High (165)	5725-5850	Low:16 Mid:16 High:16
MCS7	20	UNII 3	Low (149), Mid (157), High (165)	5725-5850	Low:13 Mid:13 High:13

CONFIGURATIONS



Configuration ADEM0044-1

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Thermostat	Resideo	TH2320WF4010	52202030005204

Peripherals in Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
AC Adapter	CUI Inc	48A-24-500	None

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Leads	No	1.7 m	No	AC Adapter	Thermostat

Configuration ADEM0044-2

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Thermostat	Resideo	TH2320WF4010	52202030005049

Peripherals in Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
AC Adapter	CUI Inc	48A-24-500	None

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Leads	No	1.7 m	No	AC Adapter	Thermostat

Configuration ADEM0044-3

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Thermostat	Resideo	TH2320WF4010	52202030005293

Peripherals in Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
AC Adapter	CUI Inc	48A-24-500	None

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Leads	No	1.7 m	No	AC Adapter	Thermostat

CONFIGURATIONS



Configuration ADEM0044-8

EUT			
Description	Manufacturer	Model/Part Number	Serial Number
Thermostat	Resideo	TH2320WF4010	52202030005143

Remote Equipment Outside of Test Setup Boundary			
Description	Manufacturer	Model/Part Number	Serial Number
AC Adapter	CUI Inc	48A-24-500	None

Cables					
Cable Type	Shield	Length (m)	Ferrite	Connection 1	Connection 2
AC Leads	No	1.7 m	No	AC Adapter	Thermostat

MODIFICATIONS



Equipment Modifications

Item	Date	Test	Modification	Note	Disposition of EUT
1	2024-07-23	Band Edge	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
2	2024-07-23	Duty Cycle	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
3	2024-07-23	Emission Bandwidth	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
4	2024-07-23	Equivalent Isotropic Radiated Power (EIRP)	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
5	2024-07-23	Maximum Conducted Output Power	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
6	2024-07-23	Maximum Power Spectral Density	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
7	2024-08-05	Powerline Conducted Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
8	2024-08-20	Frequency Stability	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
9	2024-08-26	Duty Cycle – Ch 36	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
10	2024-08-26	Emission Bandwidth – Ch 36	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
11	2024-08-26	Equivalent Isotropic Radiated Power (EIRP) – Ch 36	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
12	2024-08-26	Occupied Bandwidth – Ch 36	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
13	2024-08-26	Maximum Conducted Output Power – Ch 36	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.

MODIFICATIONS



14	2024-08-26	Maximum Power Spectral Density – Ch 36	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	EUT remained at Element following the test.
15	2024-09-20	Spurious Radiated Emissions	Tested as delivered to Test Station.	No EMI suppression devices were added or modified during this test.	Scheduled testing was completed.

POWERLINE CONDUCTED EMISSIONS



TEST DESCRIPTION

Using the mode of operation and configuration noted within this report, conducted emissions tests were performed. The frequency range investigated (scanned), is also noted in this report. Conducted power line measurements are made, unless otherwise specified, over the frequency range from 150 kHz to 30 MHz to determine the line-to-ground radio-noise voltage that is conducted from the EUT power-input terminals that are directly (or indirectly via separate transformer or power supplies) connected to a public power network. Per the standard, an insulating material was also added to ground plane between the EUT's power and remote I/O cables. Equipment is tested with power cords that are normally used or that have electrical or shielding characteristics that are the same as those cords normally used. Typically those measurements are made using a LISN (Line Impedance Stabilization Network), the 50ohm measuring port is terminated by a 50ohm EMI meter or a 50ohm resistive load. All 50ohm measuring ports of the LISN are terminated by 50ohm. The test data represents the configuration / operating mode/ model that produced the highest emission levels as compared to the specification limit.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Receiver	Gauss Instruments	TDEMI 30M	ARS	2024-05-07	2025-05-07
Cable - Conducted Cable Assembly	Northwest EMC	MNC, HGN, TYK, VAE	MNCA	2024-03-11	2025-03-11
LISN	Solar Electronics	9252-50-R-24-BNC	LIY	2024-03-27	2025-03-27

CONFIGURATIONS INVESTIGATED

ADEM0044-2

MODES INVESTIGATED

Transmitting UNII Ch 116 (5580 MHz), 6 Mbps, 20 MHz BW.
Transmitting UNII Ch 157 (5785 MHz), 6 Mbps, 20 MHz BW.
Transmitting UNII Ch 40 (5200 MHz), 6 Mbps, 20 MHz BW.
Transmitting UNII Ch 60 (5300 MHz), 6 Mbps, 20 MHz BW.

POWERLINE CONDUCTED EMISSIONS

EUT:	Fuji Thermostat	Work Order:	ADEM0044
Serial Number:	52202030005049	Date:	2024-08-30
Customer:	Ademco, Inc.	Temperature:	22.2°C
Attendees:	None	Relative Humidity:	54.5%
Customer Project:	None	Bar. Pressure (PMSL):	1017 mb
Tested By:	Christopher Heintzelman	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	ADEM0044-2

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2024	ANSI C63.10:2013
RSS-Gen Issue 5:2018+A1:2019+A2:2021	ANSI C63.10:2013

TEST PARAMETERS

Run #:	12	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

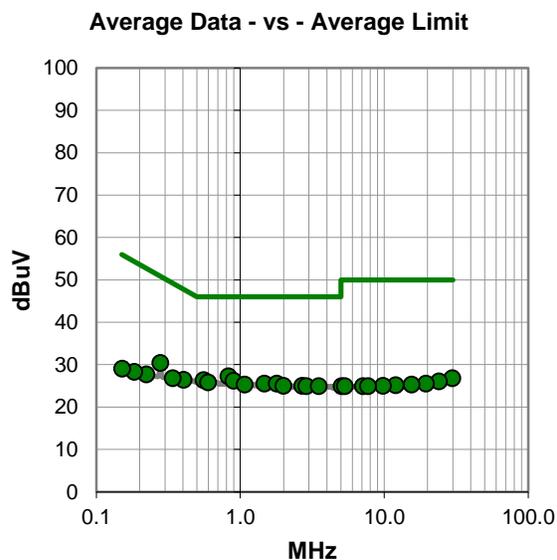
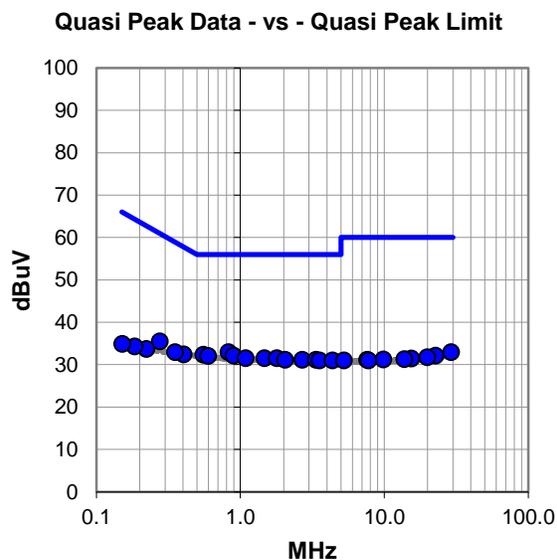
EUT powered at 24VAC via adapter.

EUT OPERATING MODES

Transmitting UNII Ch 40 (5200 MHz), 6 Mbps, 20 MHz BW.

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS



RESULTS - Run #12

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.829	12.8	20.1	32.9	56.0	-23.1
0.554	12.2	20.1	32.3	56.0	-23.7
0.898	12.0	20.1	32.1	56.0	-23.9
0.597	11.9	20.1	32.0	56.0	-24.0
1.093	11.3	20.2	31.5	56.0	-24.5
1.470	11.3	20.2	31.5	56.0	-24.5
1.796	11.3	20.2	31.5	56.0	-24.5
2.054	10.9	20.2	31.1	56.0	-24.9
2.694	10.8	20.3	31.1	56.0	-24.9
3.353	10.7	20.4	31.1	56.0	-24.9
3.553	10.6	20.4	31.0	56.0	-25.0
4.373	10.6	20.4	31.0	56.0	-25.0
0.277	15.3	20.2	35.5	60.9	-25.4
0.403	12.3	20.1	32.4	57.8	-25.4
0.353	12.8	20.1	32.9	58.9	-26.0
29.220	10.0	22.9	32.9	60.0	-27.1
22.758	10.0	22.1	32.1	60.0	-27.9
19.935	9.9	21.8	31.7	60.0	-28.3
15.437	10.0	21.4	31.4	60.0	-28.6
13.832	10.0	21.3	31.3	60.0	-28.7
9.869	10.2	21.0	31.2	60.0	-28.8
7.634	10.3	20.8	31.1	60.0	-28.9
0.223	13.5	20.2	33.7	62.7	-29.0
5.240	10.4	20.6	31.0	60.0	-29.0
7.779	10.2	20.8	31.0	60.0	-29.0

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.829	7.1	20.1	27.2	46.0	-18.8
0.556	6.2	20.1	26.3	46.0	-19.7
0.898	6.1	20.1	26.2	46.0	-19.8
0.597	5.7	20.1	25.8	46.0	-20.2
0.278	10.2	20.2	30.4	50.9	-20.5
1.470	5.3	20.2	25.5	46.0	-20.5
1.795	5.3	20.2	25.5	46.0	-20.5
1.076	5.1	20.2	25.3	46.0	-20.7
1.995	4.8	20.2	25.0	46.0	-21.0
2.695	4.7	20.3	25.0	46.0	-21.0
2.886	4.5	20.4	24.9	46.0	-21.1
3.519	4.5	20.4	24.9	46.0	-21.1
0.405	6.3	20.1	26.4	47.8	-21.4
0.339	6.7	20.1	26.8	49.2	-22.4
29.772	3.8	23.0	26.8	50.0	-23.2
24.047	3.8	22.2	26.0	50.0	-24.0
19.488	3.8	21.7	25.5	50.0	-24.5
15.535	3.9	21.4	25.3	50.0	-24.7
12.013	4.0	21.1	25.1	50.0	-24.9
9.799	4.0	21.0	25.0	50.0	-25.0
0.223	7.5	20.2	27.7	52.7	-25.0
5.071	4.3	20.6	24.9	50.0	-25.1
5.327	4.3	20.6	24.9	50.0	-25.1
7.114	4.2	20.7	24.9	50.0	-25.1
7.724	4.1	20.8	24.9	50.0	-25.1

CONCLUSION

Pass

Tested By

POWERLINE CONDUCTED EMISSIONS



EUT:	Fuji Thermostat	Work Order:	ADEM0044
Serial Number:	52202030005049	Date:	2024-08-30
Customer:	Ademco, Inc.	Temperature:	22.2°C
Attendees:	None	Relative Humidity:	54.5%
Customer Project:	None	Bar. Pressure (PMSL):	1017 mb
Tested By:	Christopher Heintzelman	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	ADEM0044-2

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2024	ANSI C63.10:2013
RSS-Gen Issue 5:2018+A1:2019+A2:2021	ANSI C63.10:2013

TEST PARAMETERS

Run #:	13	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

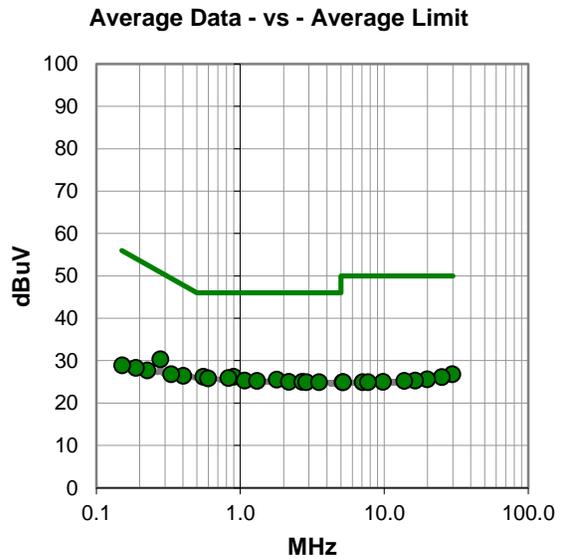
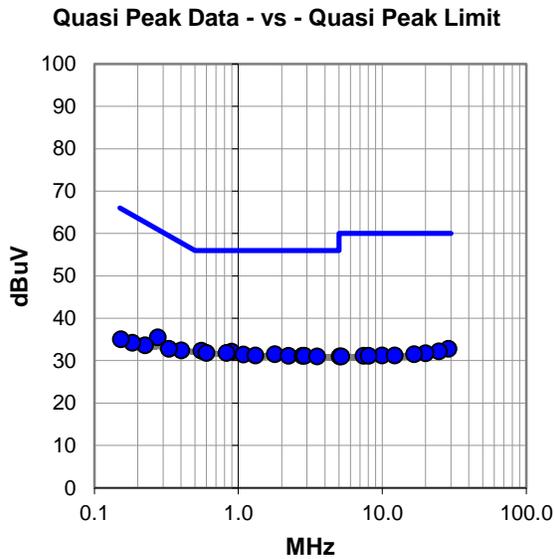
EUT powered at 24VAC via adapter.

EUT OPERATING MODES

Transmitting UNII Ch 40 (5200 MHz), 6 Mbps, 20 MHz BW.

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS



RESULTS - Run #13

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.554	12.2	20.1	32.3	56.0	-23.7
0.898	12.0	20.1	32.1	56.0	-23.9
0.600	11.7	20.1	31.8	56.0	-24.2
0.829	11.7	20.1	31.8	56.0	-24.2
1.795	11.3	20.2	31.5	56.0	-24.5
1.084	11.2	20.2	31.4	56.0	-24.6
1.317	11.0	20.2	31.2	56.0	-24.8
2.233	10.8	20.3	31.1	56.0	-24.9
2.796	10.7	20.4	31.1	56.0	-24.9
2.881	10.7	20.4	31.1	56.0	-24.9
3.537	10.6	20.4	31.0	56.0	-25.0
0.277	15.3	20.2	35.5	60.9	-25.4
0.402	12.3	20.1	32.4	57.8	-25.4
0.330	12.7	20.1	32.8	59.5	-26.7
28.953	10.0	22.8	32.8	60.0	-27.2
24.798	10.0	22.2	32.2	60.0	-27.8
20.066	9.9	21.8	31.7	60.0	-28.3
16.650	10.0	21.5	31.5	60.0	-28.5
9.984	10.2	21.0	31.2	60.0	-28.8
12.215	10.1	21.1	31.2	60.0	-28.8
7.422	10.3	20.8	31.1	60.0	-28.9
8.041	10.3	20.8	31.1	60.0	-28.9
0.225	13.4	20.2	33.6	62.6	-29.0
5.077	10.4	20.6	31.0	60.0	-29.0
5.207	10.4	20.6	31.0	60.0	-29.0

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.554	6.1	20.1	26.2	46.0	-19.8
0.898	6.1	20.1	26.2	46.0	-19.8
0.829	5.8	20.1	25.9	46.0	-20.1
0.597	5.7	20.1	25.8	46.0	-20.2
1.795	5.3	20.2	25.5	46.0	-20.5
0.278	10.1	20.2	30.3	50.9	-20.6
1.076	5.1	20.2	25.3	46.0	-20.7
1.313	5.0	20.2	25.2	46.0	-20.8
2.181	4.7	20.3	25.0	46.0	-21.0
2.692	4.7	20.3	25.0	46.0	-21.0
2.881	4.5	20.4	24.9	46.0	-21.1
3.524	4.5	20.4	24.9	46.0	-21.1
0.402	6.3	20.1	26.4	47.8	-21.4
0.332	6.7	20.1	26.8	49.4	-22.6
29.836	3.8	23.0	26.8	50.0	-23.2
25.144	3.8	22.3	26.1	50.0	-23.9
19.931	3.8	21.8	25.6	50.0	-24.4
16.411	3.8	21.5	25.3	50.0	-24.7
13.841	3.9	21.3	25.2	50.0	-24.8
0.226	7.5	20.2	27.7	52.6	-24.9
9.799	4.0	21.0	25.0	50.0	-25.0
5.145	4.3	20.6	24.9	50.0	-25.1
5.210	4.3	20.6	24.9	50.0	-25.1
7.109	4.2	20.7	24.9	50.0	-25.1
7.729	4.1	20.8	24.9	50.0	-25.1

CONCLUSION

Pass

Tested By

POWERLINE CONDUCTED EMISSIONS



EUT:	Fuji Thermostat	Work Order:	ADEM0044
Serial Number:	52202030005049	Date:	2024-08-30
Customer:	Ademco, Inc.	Temperature:	22.2°C
Attendees:	None	Relative Humidity:	54.5%
Customer Project:	None	Bar. Pressure (PMSL):	1017 mb
Tested By:	Christopher Heintzelman	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	ADEM0044-2

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2024	ANSI C63.10:2013
RSS-Gen Issue 5:2018+A1:2019+A2:2021	ANSI C63.10:2013

TEST PARAMETERS

Run #:	14	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

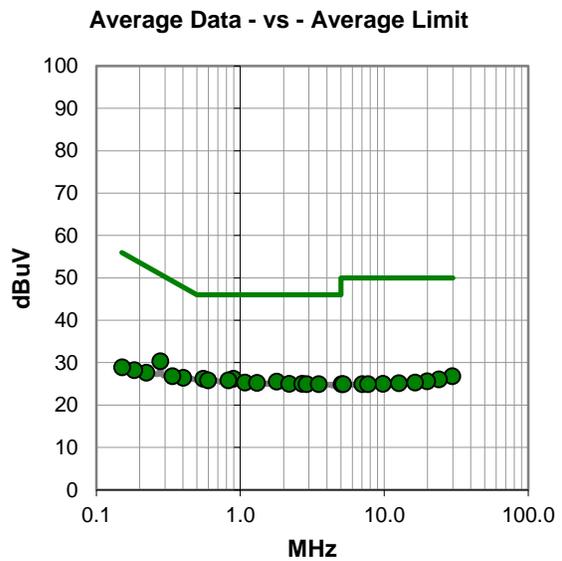
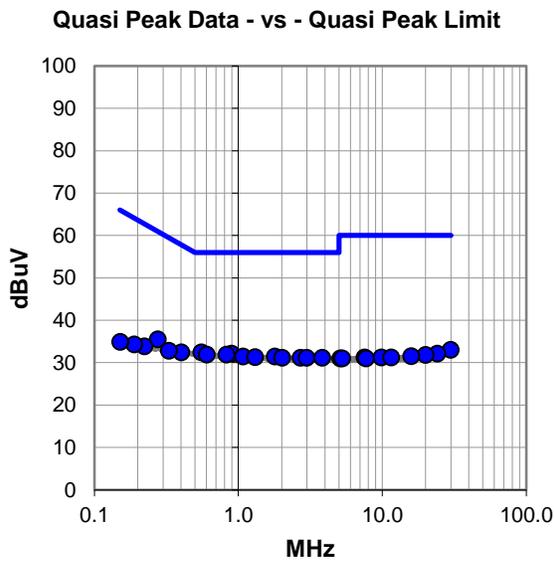
EUT powered at 24VAC via adapter.

EUT OPERATING MODES

Transmitting UNII Ch 60 (5300 MHz), 6 Mbps, 20 MHz BW.

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS



RESULTS - Run #14

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.554	12.3	20.1	32.4	56.0	-23.6
0.898	12.0	20.1	32.1	56.0	-23.9
0.603	11.8	20.1	31.9	56.0	-24.1
0.831	11.8	20.1	31.9	56.0	-24.1
1.078	11.2	20.2	31.4	56.0	-24.6
1.795	11.2	20.2	31.4	56.0	-24.6
1.311	11.1	20.2	31.3	56.0	-24.7
2.022	10.9	20.2	31.1	56.0	-24.9
2.713	10.8	20.3	31.1	56.0	-24.9
2.979	10.7	20.4	31.1	56.0	-24.9
3.841	10.7	20.4	31.1	56.0	-24.9
0.277	15.3	20.2	35.5	60.9	-25.4
0.402	12.3	20.1	32.4	57.8	-25.4
0.330	12.7	20.1	32.8	59.5	-26.7
29.883	10.0	23.0	33.0	60.0	-27.0
24.128	9.9	22.2	32.1	60.0	-27.9
20.040	10.0	21.8	31.8	60.0	-28.2
15.934	10.1	21.4	31.5	60.0	-28.5
7.552	10.4	20.8	31.2	60.0	-28.8
9.866	10.2	21.0	31.2	60.0	-28.8
11.572	10.2	21.0	31.2	60.0	-28.8
0.223	13.6	20.2	33.8	62.7	-28.9
5.124	10.4	20.6	31.0	60.0	-29.0
5.277	10.4	20.6	31.0	60.0	-29.0
7.715	10.2	20.8	31.0	60.0	-29.0

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.554	6.1	20.1	26.2	46.0	-19.8
0.898	6.1	20.1	26.2	46.0	-19.8
0.597	5.7	20.1	25.8	46.0	-20.2
0.831	5.7	20.1	25.8	46.0	-20.2
1.795	5.3	20.2	25.5	46.0	-20.5
0.278	10.1	20.2	30.3	50.9	-20.6
1.078	5.1	20.2	25.3	46.0	-20.7
1.311	5.0	20.2	25.2	46.0	-20.8
2.190	4.7	20.3	25.0	46.0	-21.0
2.694	4.7	20.3	25.0	46.0	-21.0
2.890	4.5	20.4	24.9	46.0	-21.1
3.516	4.5	20.4	24.9	46.0	-21.1
0.402	6.3	20.1	26.4	47.8	-21.4
0.338	6.7	20.1	26.8	49.3	-22.5
29.767	3.8	23.0	26.8	50.0	-23.2
24.026	3.8	22.2	26.0	50.0	-24.0
19.911	3.8	21.8	25.6	50.0	-24.4
16.397	3.8	21.5	25.3	50.0	-24.7
12.645	3.9	21.2	25.1	50.0	-24.9
9.807	4.0	21.0	25.0	50.0	-25.0
0.223	7.4	20.2	27.6	52.7	-25.1
5.081	4.3	20.6	24.9	50.0	-25.1
5.208	4.3	20.6	24.9	50.0	-25.1
7.063	4.2	20.7	24.9	50.0	-25.1
7.723	4.1	20.8	24.9	50.0	-25.1

CONCLUSION

Pass

Tested By

POWERLINE CONDUCTED EMISSIONS



EUT:	Fuji Thermostat	Work Order:	ADEM0044
Serial Number:	52202030005049	Date:	2024-08-30
Customer:	Ademco, Inc.	Temperature:	22.2°C
Attendees:	None	Relative Humidity:	54.5%
Customer Project:	None	Bar. Pressure (PMSL):	1017 mb
Tested By:	Christopher Heintzelman	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	ADEM0044-2

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2024	ANSI C63.10:2013
RSS-Gen Issue 5:2018+A1:2019+A2:2021	ANSI C63.10:2013

TEST PARAMETERS

Run #:	15	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

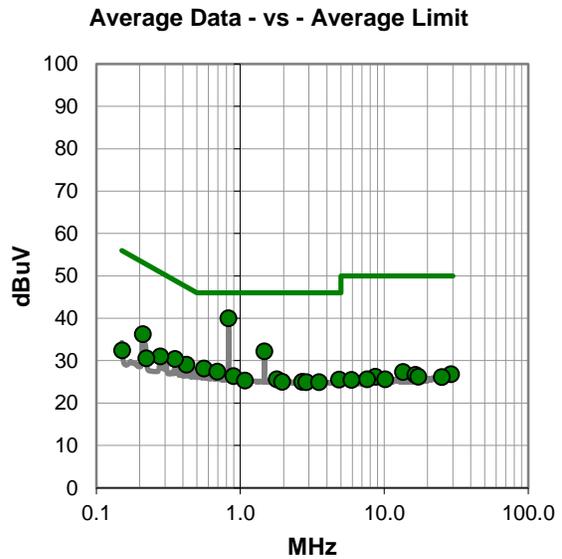
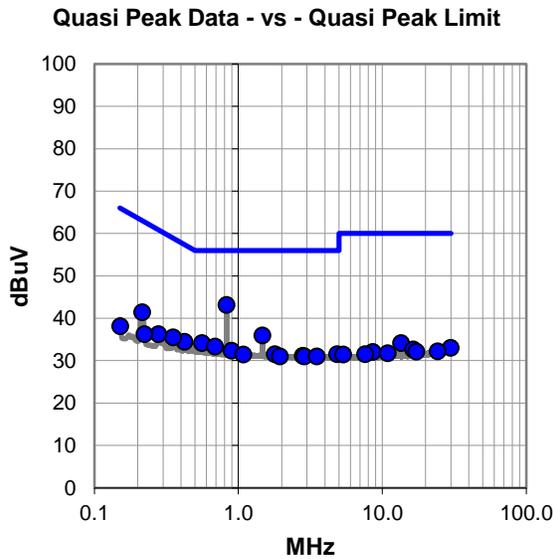
EUT powered at 24VAC via adapter.

EUT OPERATING MODES

Transmitting UNII Ch 60 (5300 MHz), 6 Mbps, 20 MHz BW.

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS



RESULTS - Run #15

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.829	23.0	20.1	43.1	56.0	-12.9
1.470	15.7	20.2	35.9	56.0	-20.1
0.216	21.1	20.3	41.4	63.0	-21.6
0.559	14.0	20.1	34.1	56.0	-21.9
0.689	13.2	20.1	33.3	56.0	-22.7
0.423	14.3	20.1	34.4	57.4	-23.0
0.353	15.4	20.1	35.5	58.9	-23.4
0.898	12.2	20.1	32.3	56.0	-23.7
1.795	11.3	20.2	31.5	56.0	-24.5
4.875	11.0	20.5	31.5	56.0	-24.5
1.084	11.2	20.2	31.4	56.0	-24.6
0.278	16.0	20.2	36.2	60.9	-24.7
2.814	10.7	20.4	31.1	56.0	-24.9
1.943	10.8	20.2	31.0	56.0	-25.0
2.884	10.6	20.4	31.0	56.0	-25.0
3.516	10.6	20.4	31.0	56.0	-25.0
13.559	12.9	21.2	34.1	60.0	-25.9
0.223	16.0	20.2	36.2	62.7	-26.5
29.868	10.0	23.0	33.0	60.0	-27.0
16.388	11.1	21.5	32.6	60.0	-27.4
24.246	10.0	22.2	32.2	60.0	-27.8
0.152	17.5	20.6	38.1	65.9	-27.8
17.303	10.5	21.6	32.1	60.0	-27.9
8.617	11.2	20.8	32.0	60.0	-28.0
10.942	10.7	21.0	31.7	60.0	-28.3

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.829	19.9	20.1	40.0	46.0	-6.0
1.470	12.0	20.2	32.2	46.0	-13.8
0.211	15.9	20.3	36.2	53.2	-17.0
0.559	8.0	20.1	28.1	46.0	-17.9
0.423	8.9	20.1	29.0	47.4	-18.4
0.353	10.3	20.1	30.4	48.9	-18.5
0.692	7.3	20.1	27.4	46.0	-18.6
0.898	6.2	20.1	26.3	46.0	-19.7
0.278	10.8	20.2	31.0	50.9	-19.9
1.795	5.4	20.2	25.6	46.0	-20.4
4.874	5.0	20.5	25.5	46.0	-20.5
1.081	5.1	20.2	25.3	46.0	-20.7
1.957	4.8	20.2	25.0	46.0	-21.0
2.692	4.7	20.3	25.0	46.0	-21.0
2.883	4.5	20.4	24.9	46.0	-21.1
3.534	4.5	20.4	24.9	46.0	-21.1
0.223	10.3	20.2	30.5	52.7	-22.2
13.559	6.1	21.2	27.3	50.0	-22.7
29.172	3.9	22.9	26.8	50.0	-23.2
16.539	5.1	21.5	26.6	50.0	-23.4
0.152	11.8	20.6	32.4	55.9	-23.5
8.688	5.4	20.8	26.2	50.0	-23.8
17.303	4.6	21.6	26.2	50.0	-23.8
25.146	3.8	22.3	26.1	50.0	-23.9
7.626	4.8	20.8	25.6	50.0	-24.4

CONCLUSION

Pass

Tested By

POWERLINE CONDUCTED EMISSIONS



EUT:	Fuji Thermostat	Work Order:	ADEM0044
Serial Number:	52202030005049	Date:	2024-08-30
Customer:	Ademco, Inc.	Temperature:	22.2°C
Attendees:	None	Relative Humidity:	54.5%
Customer Project:	None	Bar. Pressure (PMSL):	1017 mb
Tested By:	Christopher Heintzelman	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	ADEM0044-2

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2024	ANSI C63.10:2013
RSS-Gen Issue 5:2018+A1:2019+A2:2021	ANSI C63.10:2013

TEST PARAMETERS

Run #:	16	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

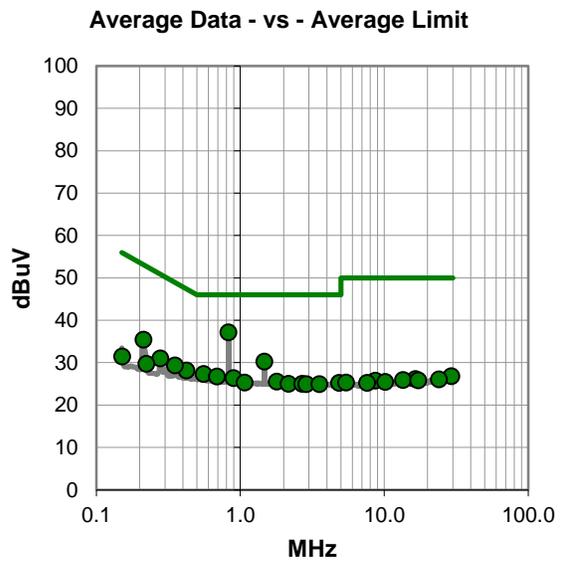
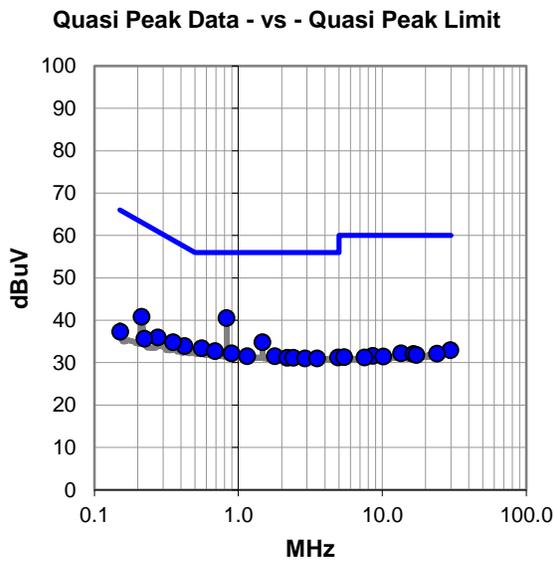
EUT powered at 24VAC via adapter.

EUT OPERATING MODES

Transmitting UNII Ch 116 (5580 MHz), 6 Mbps, 20 MHz BW.

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS



RESULTS - Run #16

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.831	20.4	20.1	40.5	56.0	-15.5
1.470	14.6	20.2	34.8	56.0	-21.2
0.213	20.5	20.3	40.8	63.1	-22.3
0.557	13.3	20.1	33.4	56.0	-22.6
0.689	12.6	20.1	32.7	56.0	-23.3
0.423	13.8	20.1	33.9	57.4	-23.5
0.899	12.1	20.1	32.2	56.0	-23.8
0.353	14.7	20.1	34.8	58.9	-24.1
1.156	11.3	20.2	31.5	56.0	-24.5
1.795	11.3	20.2	31.5	56.0	-24.5
4.944	10.7	20.5	31.2	56.0	-24.8
2.190	10.8	20.3	31.1	56.0	-24.9
2.414	10.8	20.3	31.1	56.0	-24.9
0.277	15.7	20.2	35.9	60.9	-25.0
2.916	10.6	20.4	31.0	56.0	-25.0
3.533	10.6	20.4	31.0	56.0	-25.0
0.223	15.4	20.2	35.6	62.7	-27.1
29.822	9.9	23.0	32.9	60.0	-27.1
13.562	11.0	21.2	32.2	60.0	-27.8
24.014	9.9	22.2	32.1	60.0	-27.9
16.539	10.5	21.5	32.0	60.0	-28.0
17.305	10.2	21.6	31.8	60.0	-28.2
8.618	10.8	20.8	31.6	60.0	-28.4
10.178	10.4	21.0	31.4	60.0	-28.6
0.152	16.7	20.6	37.3	65.9	-28.6

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.831	17.0	20.1	37.1	46.0	-8.9
1.470	10.0	20.2	30.2	46.0	-15.8
0.213	15.1	20.3	35.4	53.1	-17.7
0.557	7.2	20.1	27.3	46.0	-18.7
0.423	8.0	20.1	28.1	47.4	-19.3
0.690	6.6	20.1	26.7	46.0	-19.3
0.353	9.2	20.1	29.3	48.9	-19.6
0.898	6.2	20.1	26.3	46.0	-19.7
0.278	10.8	20.2	31.0	50.9	-19.9
1.795	5.3	20.2	25.5	46.0	-20.5
1.076	5.1	20.2	25.3	46.0	-20.7
4.874	4.7	20.5	25.2	46.0	-20.8
2.172	4.7	20.3	25.0	46.0	-21.0
2.694	4.7	20.3	25.0	46.0	-21.0
2.881	4.5	20.4	24.9	46.0	-21.1
3.545	4.5	20.4	24.9	46.0	-21.1
0.223	9.5	20.2	29.7	52.7	-23.0
29.319	3.9	22.9	26.8	50.0	-23.2
16.540	4.6	21.5	26.1	50.0	-23.9
24.075	3.8	22.2	26.0	50.0	-24.0
13.562	4.7	21.2	25.9	50.0	-24.1
17.305	4.2	21.6	25.8	50.0	-24.2
8.688	4.9	20.8	25.7	50.0	-24.3
0.152	10.8	20.6	31.4	55.9	-24.5
10.179	4.4	21.0	25.4	50.0	-24.6

CONCLUSION

Pass

Tested By

POWERLINE CONDUCTED EMISSIONS



EUT:	Fuji Thermostat	Work Order:	ADEM0044
Serial Number:	52202030005049	Date:	2024-08-30
Customer:	Ademco, Inc.	Temperature:	22.2°C
Attendees:	None	Relative Humidity:	54.5%
Customer Project:	None	Bar. Pressure (PMSL):	1017 mb
Tested By:	Christopher Heintzelman	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	ADEM0044-2

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2024	ANSI C63.10:2013
RSS-Gen Issue 5:2018+A1:2019+A2:2021	ANSI C63.10:2013

TEST PARAMETERS

Run #:	19	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

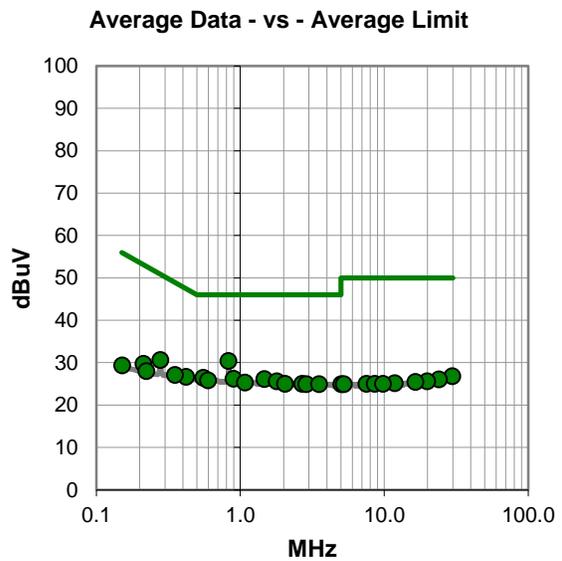
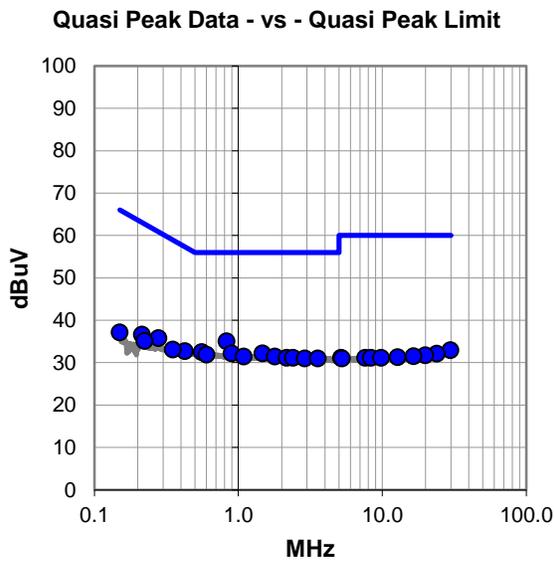
EUT powered at 24VAC via adapter.

EUT OPERATING MODES

Transmitting UNII Ch 116 (5580 MHz), 6 Mbps, 20 MHz BW.

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS



RESULTS - Run #19

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.831	14.9	20.1	35.0	56.0	-21.0
0.556	12.4	20.1	32.5	56.0	-23.5
0.898	12.1	20.1	32.2	56.0	-23.8
1.470	12.0	20.2	32.2	56.0	-23.8
0.600	11.8	20.1	31.9	56.0	-24.1
1.093	11.2	20.2	31.4	56.0	-24.6
1.795	11.2	20.2	31.4	56.0	-24.6
0.425	12.6	20.1	32.7	57.4	-24.7
2.170	10.8	20.3	31.1	56.0	-24.9
2.405	10.8	20.3	31.1	56.0	-24.9
2.893	10.6	20.4	31.0	56.0	-25.0
3.563	10.6	20.4	31.0	56.0	-25.0
0.278	15.6	20.2	35.8	60.9	-25.1
0.351	13.0	20.1	33.1	58.9	-25.8
0.214	16.3	20.3	36.6	63.0	-26.4
29.738	9.9	23.0	32.9	60.0	-27.1
0.223	14.9	20.2	35.1	62.7	-27.6
23.985	9.9	22.2	32.1	60.0	-27.9
19.966	9.9	21.8	31.7	60.0	-28.3
16.464	10.0	21.5	31.5	60.0	-28.5
12.776	10.1	21.2	31.3	60.0	-28.7
0.150	16.5	20.6	37.1	66.0	-28.9
5.179	10.5	20.6	31.1	60.0	-28.9
7.608	10.3	20.8	31.1	60.0	-28.9
8.339	10.3	20.8	31.1	60.0	-28.9

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.831	10.3	20.1	30.4	46.0	-15.6
0.554	6.3	20.1	26.4	46.0	-19.6
0.898	6.1	20.1	26.2	46.0	-19.8
1.470	5.9	20.2	26.1	46.0	-19.9
0.597	5.7	20.1	25.8	46.0	-20.2
0.278	10.4	20.2	30.6	50.9	-20.3
1.796	5.4	20.2	25.6	46.0	-20.4
1.079	5.1	20.2	25.3	46.0	-20.7
0.422	6.5	20.1	26.6	47.4	-20.8
2.048	4.8	20.2	25.0	46.0	-21.0
2.694	4.7	20.3	25.0	46.0	-21.0
2.883	4.5	20.4	24.9	46.0	-21.1
3.531	4.5	20.4	24.9	46.0	-21.1
0.353	7.0	20.1	27.1	48.9	-21.8
29.763	3.8	23.0	26.8	50.0	-23.2
0.213	9.4	20.3	29.7	53.1	-23.4
24.024	3.8	22.2	26.0	50.0	-24.0
19.946	3.8	21.8	25.6	50.0	-24.4
16.539	3.9	21.5	25.4	50.0	-24.6
0.223	7.8	20.2	28.0	52.7	-24.7
11.841	4.0	21.1	25.1	50.0	-24.9
7.558	4.2	20.8	25.0	50.0	-25.0
8.617	4.2	20.8	25.0	50.0	-25.0
9.801	4.0	21.0	25.0	50.0	-25.0
5.055	4.3	20.6	24.9	50.0	-25.1

CONCLUSION

Pass

Tested By

POWERLINE CONDUCTED EMISSIONS



EUT:	Fuji Thermostat	Work Order:	ADEM0044
Serial Number:	52202030005049	Date:	2024-08-30
Customer:	Ademco, Inc.	Temperature:	22.2°C
Attendees:	None	Relative Humidity:	54.5%
Customer Project:	None	Bar. Pressure (PMSL):	1017 mb
Tested By:	Christopher Heintzelman	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	ADEM0044-2

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2024	ANSI C63.10:2013
RSS-Gen Issue 5:2018+A1:2019+A2:2021	ANSI C63.10:2013

TEST PARAMETERS

Run #:	20	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

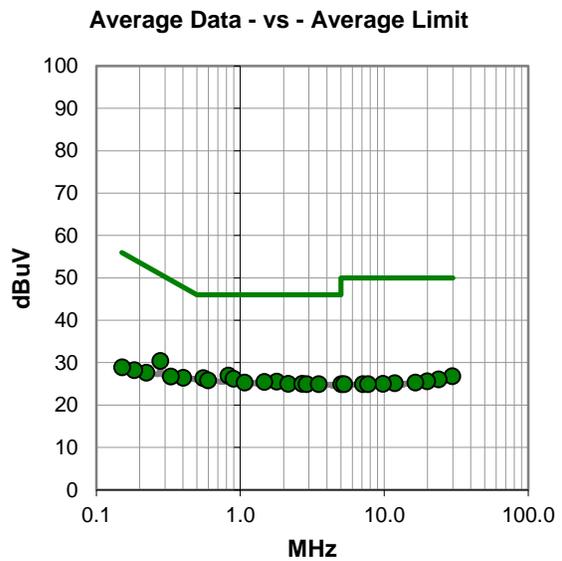
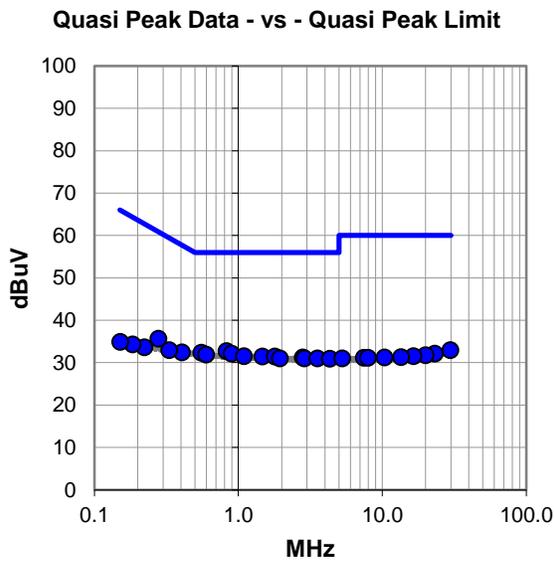
EUT powered at 24VAC via adapter.

EUT OPERATING MODES

Transmitting UNII Ch 116 (5580 MHz), 6 Mbps, 20 MHz BW.

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS



RESULTS - Run #20

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.829	12.6	20.1	32.7	56.0	-23.3
0.554	12.2	20.1	32.3	56.0	-23.7
0.898	12.0	20.1	32.1	56.0	-23.9
0.599	11.8	20.1	31.9	56.0	-24.1
1.094	11.3	20.2	31.5	56.0	-24.5
1.470	11.2	20.2	31.4	56.0	-24.6
1.795	11.2	20.2	31.4	56.0	-24.6
2.805	10.8	20.4	31.2	56.0	-24.8
1.943	10.8	20.2	31.0	56.0	-25.0
2.881	10.6	20.4	31.0	56.0	-25.0
3.545	10.6	20.4	31.0	56.0	-25.0
4.323	10.5	20.4	30.9	56.0	-25.1
0.278	15.4	20.2	35.6	60.9	-25.3
0.406	12.3	20.1	32.4	57.7	-25.3
0.332	12.8	20.1	32.9	59.4	-26.5
29.777	9.9	23.0	32.9	60.0	-27.1
23.150	10.0	22.1	32.1	60.0	-27.9
19.990	9.9	21.8	31.7	60.0	-28.3
16.540	10.0	21.5	31.5	60.0	-28.5
13.557	10.1	21.2	31.3	60.0	-28.7
10.387	10.2	21.0	31.2	60.0	-28.8
7.456	10.3	20.8	31.1	60.0	-28.9
7.982	10.3	20.8	31.1	60.0	-28.9
5.283	10.4	20.6	31.0	60.0	-29.0
0.223	13.4	20.2	33.6	62.7	-29.1

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.829	6.8	20.1	26.9	46.0	-19.1
0.554	6.2	20.1	26.3	46.0	-19.7
0.898	6.1	20.1	26.2	46.0	-19.8
0.597	5.7	20.1	25.8	46.0	-20.2
0.278	10.2	20.2	30.4	50.9	-20.5
1.795	5.3	20.2	25.5	46.0	-20.5
1.470	5.2	20.2	25.4	46.0	-20.6
1.076	5.1	20.2	25.3	46.0	-20.7
2.161	4.7	20.3	25.0	46.0	-21.0
2.692	4.7	20.3	25.0	46.0	-21.0
2.895	4.5	20.4	24.9	46.0	-21.1
3.519	4.5	20.4	24.9	46.0	-21.1
0.402	6.3	20.1	26.4	47.8	-21.4
0.330	6.6	20.1	26.7	49.5	-22.8
29.760	3.8	23.0	26.8	50.0	-23.2
23.986	3.8	22.2	26.0	50.0	-24.0
19.927	3.8	21.8	25.6	50.0	-24.4
16.462	3.8	21.5	25.3	50.0	-24.7
11.838	4.0	21.1	25.1	50.0	-24.9
9.810	4.0	21.0	25.0	50.0	-25.0
0.223	7.4	20.2	27.6	52.7	-25.1
5.049	4.3	20.6	24.9	50.0	-25.1
5.275	4.3	20.6	24.9	50.0	-25.1
7.115	4.2	20.7	24.9	50.0	-25.1
7.716	4.1	20.8	24.9	50.0	-25.1

CONCLUSION

Pass

Tested By

POWERLINE CONDUCTED EMISSIONS



EUT:	Fuji Thermostat	Work Order:	ADEM0044
Serial Number:	52202030005049	Date:	2024-08-30
Customer:	Ademco, Inc.	Temperature:	22.2°C
Attendees:	None	Relative Humidity:	54.5%
Customer Project:	None	Bar. Pressure (PMSL):	1017 mb
Tested By:	Christopher Heintzelman	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	ADEM0044-2

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2024	ANSI C63.10:2013
RSS-Gen Issue 5:2018+A1:2019+A2:2021	ANSI C63.10:2013

TEST PARAMETERS

Run #:	21	Line:	High Line	Add. Ext. Attenuation (dB):	0
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COMMENTS

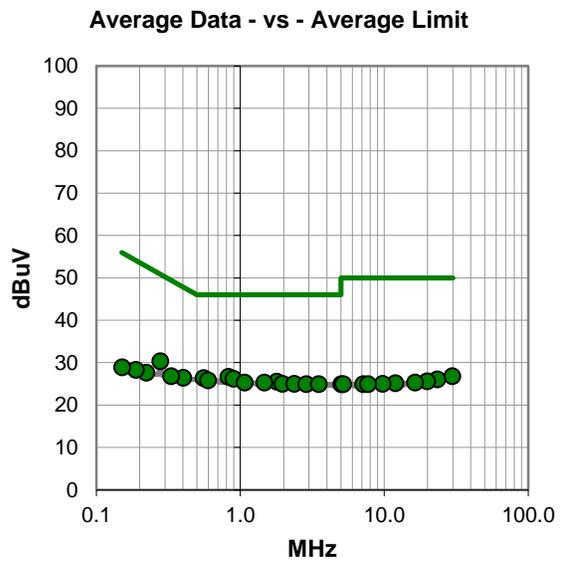
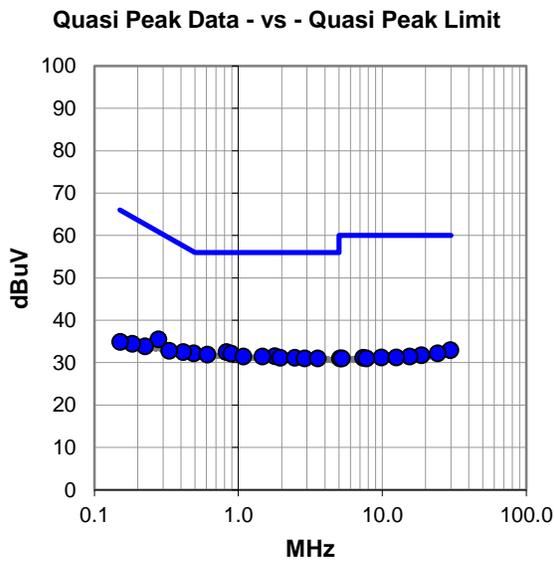
EUT powered at 24VAC via adapter.

EUT OPERATING MODES

Transmitting UNII Ch 157 (5785 MHz), 6 Mbps, 20 MHz BW.

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS



RESULTS - Run #21

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.829	12.4	20.1	32.5	56.0	-23.5
0.896	12.0	20.1	32.1	56.0	-23.9
0.490	12.1	20.1	32.2	56.2	-24.0
0.609	11.8	20.1	31.9	56.0	-24.1
1.795	11.3	20.2	31.5	56.0	-24.5
1.087	11.2	20.2	31.4	56.0	-24.6
1.471	11.2	20.2	31.4	56.0	-24.6
1.961	10.9	20.2	31.1	56.0	-24.9
2.469	10.8	20.3	31.1	56.0	-24.9
0.415	12.4	20.1	32.5	57.5	-25.0
2.895	10.6	20.4	31.0	56.0	-25.0
3.562	10.6	20.4	31.0	56.0	-25.0
0.278	15.3	20.2	35.5	60.9	-25.4
0.332	12.7	20.1	32.8	59.4	-26.6
29.832	9.9	23.0	32.9	60.0	-27.1
24.314	10.0	22.2	32.2	60.0	-27.8
18.734	10.0	21.7	31.7	60.0	-28.3
15.535	10.0	21.4	31.4	60.0	-28.6
9.856	10.2	21.0	31.2	60.0	-28.8
12.527	10.1	21.1	31.2	60.0	-28.8
0.225	13.6	20.2	33.8	62.6	-28.8
7.369	10.3	20.8	31.1	60.0	-28.9
5.088	10.4	20.6	31.0	60.0	-29.0
5.254	10.4	20.6	31.0	60.0	-29.0
7.753	10.2	20.8	31.0	60.0	-29.0

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.829	6.5	20.1	26.6	46.0	-19.4
0.556	6.2	20.1	26.3	46.0	-19.7
0.898	6.1	20.1	26.2	46.0	-19.8
0.597	5.7	20.1	25.8	46.0	-20.2
1.795	5.3	20.2	25.5	46.0	-20.5
0.278	10.1	20.2	30.3	50.9	-20.6
1.076	5.1	20.2	25.3	46.0	-20.7
1.470	5.1	20.2	25.3	46.0	-20.7
1.972	4.8	20.2	25.0	46.0	-21.0
2.381	4.7	20.3	25.0	46.0	-21.0
2.881	4.5	20.4	24.9	46.0	-21.1
3.517	4.5	20.4	24.9	46.0	-21.1
0.402	6.3	20.1	26.4	47.8	-21.4
0.332	6.7	20.1	26.8	49.4	-22.6
29.738	3.8	23.0	26.8	50.0	-23.2
23.437	3.9	22.1	26.0	50.0	-24.0
19.912	3.8	21.8	25.6	50.0	-24.4
16.388	3.8	21.5	25.3	50.0	-24.7
11.961	4.0	21.1	25.1	50.0	-24.9
9.796	4.0	21.0	25.0	50.0	-25.0
0.223	7.4	20.2	27.6	52.7	-25.1
5.042	4.3	20.6	24.9	50.0	-25.1
5.203	4.3	20.6	24.9	50.0	-25.1
7.181	4.2	20.7	24.9	50.0	-25.1
7.732	4.1	20.8	24.9	50.0	-25.1

CONCLUSION

Pass

Tested By

POWERLINE CONDUCTED EMISSIONS



EUT:	Fuji Thermostat	Work Order:	ADEM0044
Serial Number:	52202030005049	Date:	2024-08-30
Customer:	Ademco, Inc.	Temperature:	22.2°C
Attendees:	None	Relative Humidity:	54.5%
Customer Project:	None	Bar. Pressure (PMSL):	1017 mb
Tested By:	Christopher Heintzelman	Job Site:	MN03
Power:	110VAC/60Hz	Configuration:	ADEM0044-2

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.207:2024	ANSI C63.10:2013
RSS-Gen Issue 5:2018+A1:2019+A2:2021	ANSI C63.10:2013

TEST PARAMETERS

Run #:	22	Line:	Neutral	Add. Ext. Attenuation (dB):	0
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COMMENTS

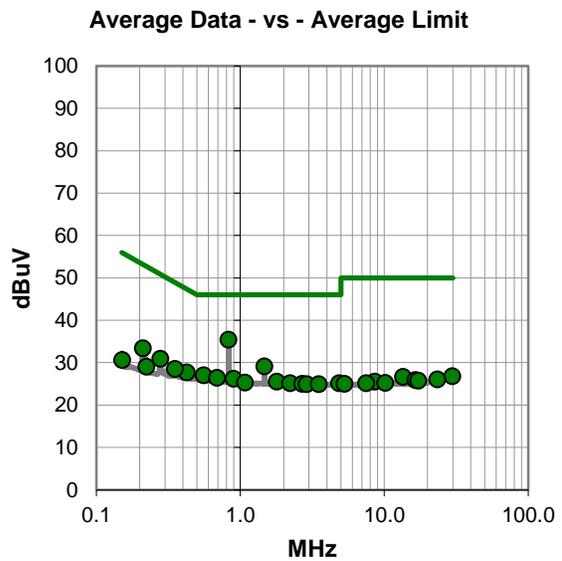
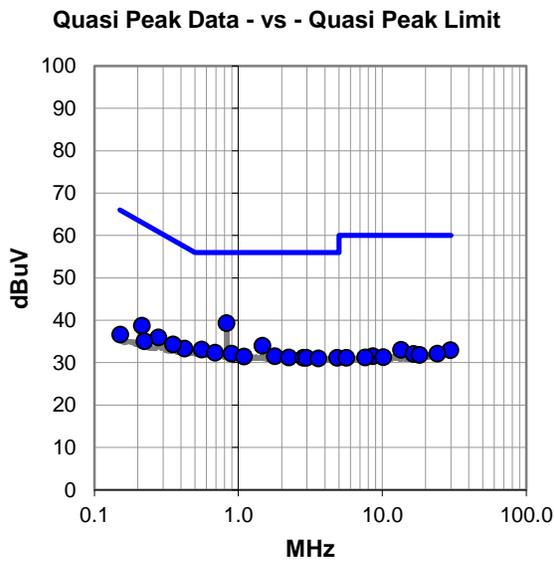
EUT powered at 24VAC via adapter.

EUT OPERATING MODES

Transmitting UNII Ch 157 (5785 MHz), 6 Mbps, 20 MHz BW.

DEVIATIONS FROM TEST STANDARD

None



POWERLINE CONDUCTED EMISSIONS



RESULTS - Run #22

Quasi Peak Data - vs - Quasi Peak Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.829	19.2	20.1	39.3	56.0	-16.7
1.470	13.8	20.2	34.0	56.0	-22.0
0.557	13.0	20.1	33.1	56.0	-22.9
0.690	12.2	20.1	32.3	56.0	-23.7
0.898	12.0	20.1	32.1	56.0	-23.9
0.423	13.2	20.1	33.3	57.4	-24.1
0.214	18.4	20.3	38.7	63.0	-24.3
1.795	11.3	20.2	31.5	56.0	-24.5
0.353	14.2	20.1	34.3	58.9	-24.6
1.096	11.2	20.2	31.4	56.0	-24.6
2.240	10.9	20.3	31.2	56.0	-24.8
2.842	10.7	20.4	31.1	56.0	-24.9
2.973	10.7	20.4	31.1	56.0	-24.9
4.874	10.6	20.5	31.1	56.0	-24.9
0.278	15.7	20.2	35.9	60.9	-25.0
3.597	10.6	20.4	31.0	56.0	-25.0
13.559	11.8	21.2	33.0	60.0	-27.0
29.806	9.9	23.0	32.9	60.0	-27.1
0.223	14.8	20.2	35.0	62.7	-27.7
24.139	9.9	22.2	32.1	60.0	-27.9
16.539	10.5	21.5	32.0	60.0	-28.0
18.222	10.2	21.6	31.8	60.0	-28.2
8.618	10.7	20.8	31.5	60.0	-28.5
10.181	10.3	21.0	31.3	60.0	-28.7
7.626	10.4	20.8	31.2	60.0	-28.8

Average Data - vs - Average Limit

Freq (MHz)	Amp. (dBuV)	Factor (dB)	Adjusted (dBuV)	Spec. Limit (dBuV)	Margin (dB)
0.829	15.3	20.1	35.4	46.0	-10.6
1.470	8.9	20.2	29.1	46.0	-16.9
0.557	6.9	20.1	27.0	46.0	-19.0
0.690	6.3	20.1	26.4	46.0	-19.6
0.425	7.6	20.1	27.7	47.4	-19.7
0.898	6.1	20.1	26.2	46.0	-19.8
0.211	13.1	20.3	33.4	53.2	-19.8
0.278	10.7	20.2	30.9	50.9	-20.0
0.353	8.4	20.1	28.5	48.9	-20.4
1.795	5.3	20.2	25.5	46.0	-20.5
1.078	5.1	20.2	25.3	46.0	-20.7
2.224	4.8	20.3	25.1	46.0	-20.9
4.872	4.6	20.5	25.1	46.0	-20.9
2.695	4.7	20.3	25.0	46.0	-21.0
2.890	4.5	20.4	24.9	46.0	-21.1
3.516	4.5	20.4	24.9	46.0	-21.1
29.754	3.8	23.0	26.8	50.0	-23.2
13.559	5.4	21.2	26.6	50.0	-23.4
0.223	8.8	20.2	29.0	52.7	-23.7
23.437	3.9	22.1	26.0	50.0	-24.0
16.539	4.4	21.5	25.9	50.0	-24.1
17.303	4.1	21.6	25.7	50.0	-24.3
8.618	4.7	20.8	25.5	50.0	-24.5
10.176	4.2	21.0	25.2	50.0	-24.8
7.488	4.3	20.8	25.1	50.0	-24.9

CONCLUSION

Pass

Tested By

FREQUENCY STABILITY

TEST DESCRIPTION

Testing was performed using the mode(s) of operation and configuration(s) noted within the report. The individuals and/or the organization requesting the test provided the modes, configurations and settings used to complete the evaluation. The actual test parameters are specified in the test data, this includes items such as investigated frequency range (scanned) and test levels. The testing methods and performance specifications, as well as the test site used for the evaluation are indicated in the test data.

The measurement was made using a direct connection between the RF output of the EUT and a spectrum analyzer.

The spectrum analyzer is equipped with a precision frequency reference that exceeds the stability requirement of the EUT.

Measurements were made at the edges of the main transmit bands as called out on the data sheets. The test was carried with the carrier modulated.

The analyzer was placed in a low resolution bandwidth for best frequency accuracy. The trace was set to max hold to capture the entire envelope of the carrier. Using the marker delta function of the analyzer, markers were placed 20 dBc on the low side and high side of the envelope. The center of the carrier was determined from the average of the marker delta function, and marked using a 3rd marker.

The primary supply voltage was varied from 18V to 30VAC of the nominal voltage. Using a temperature chamber, the transmit frequency was recorded at the extremes of the specified temperature range (0 ° to +50° C) and at 10°C intervals. The test voltages and temperatures were declared by the customer.

Where a ppm limit applies: $\text{ppm} = (\text{Measured Frequency} / \text{Measured Nominal Frequency} - 1) * 1,000,000$

Per the requirements of FCC 15.407:

“Manufacturers of U-NII devices are responsible for ensuring frequency stability such that an emission is maintained within the band of operation under all conditions of normal operation as specified in the user’s manual.”

No specific limits are provided in either FCC 15.407, the product specific rule part, or FCC 2.1055, the equipment authorization procedure for testing frequency stability. While there are no limits called out, any results less than 100ppm will still allow the radio to be operating within the band.

TEST EQUIPMENT

Description	Manufacturer	Model	ID	Last Cal.	Cal. Due
Analyzer - Spectrum Analyzer	Keysight	N9010A	AFM	2024-05-22	2025-05-22
Generator - Signal	Agilent	N5183A	TIK	2022-01-24	2025-01-24
Cable	Micro-Coax	UFD150A-1-0720-200200	MNL	2023-09-05	2024-09-05
Block - DC	Fairview Microwave	SD3379	ANH	2023-09-05	2024-09-05
Attenuator	Fairview Microwave	SA4014-20	AQI	2023-09-05	2024-09-05
Thermometer	Omegaette	HH311	DUY	2024-04-09	2025-04-09
Meter - Multimeter	Fluke	114	MMU	2024-01-26	2025-01-26

FREQUENCY STABILITY



EUT:	Fuji Thermostat	Work Order:	ADEM0044
Serial Number:	52202030005143	Date:	2024-08-20
Customer:	Ademco, Inc.	Temperature:	21.9°C
Attendees:	None	Relative Humidity:	56.5%
Customer Project:	None	Bar. Pressure (PMSL):	1023 mbar
Tested By:	Christopher Heintzelman	Job Site:	MN11
Power:	110VAC/60Hz	Configuration:	ADEM0044-8

TEST SPECIFICATIONS

Specification:	Method:
FCC 15.407:2024	ANSI C63.10:2013
RSS-247 Issue 3:2023	ANSI C63.10:2013

COMMENTS

Reference level offset includes attenuator, measurement cable, and DC block.
A CW mode was not available, so the lowest data rate (6 Mbps) was used.

DEVIATIONS FROM TEST STANDARD

None

CONCLUSION

Pass

Tested By

TEST RESULTS

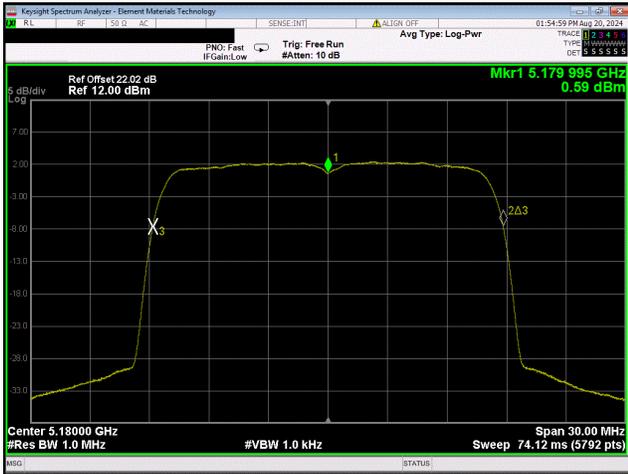
	Measured Value (MHz)	Nominal Value (MHz)	Error (PPM)	Limit (PPM)	Results
5150 MHz - 5250 MHz - Low Channel, 5180 MHz					
Voltage: 30 VAC	5179.99482	5179.99741	0.5	100	Pass
Voltage: 100% (24 VAC)	5179.99741	5179.99741	0.0	100	Pass
Voltage: 18 VAC	5179.992229	5179.99741	1.0	100	Pass
Temperature: +50°	5179.971508	5179.99741	5.0	100	Pass
Temperature: +40°	5179.966327	5179.99741	6.0	100	Pass
Temperature: +30°	5179.981868	5179.99741	3.0	100	Pass
Temperature: +20°	5179.99482	5179.99741	0.5	100	Pass
Temperature: +10°	5180.00259	5179.99741	1.0	100	Pass
Temperature: 0°	5180.015541	5179.99741	3.5	100	Pass
5250 MHz - 5350 MHz - High Channel, 5320 MHz					
Voltage: 30 VAC	5319.981376	5319.981376	0.0	100	Pass
Voltage: 100% (24 VAC)	5319.981376	5319.981376	0.0	100	Pass
Voltage: 18 VAC	5319.984037	5319.981376	0.5	100	Pass
Temperature: +50°	5319.960092	5319.981376	4.0	100	Pass
Temperature: +40°	5319.957432	5319.981376	4.5	100	Pass
Temperature: +30°	5319.960092	5319.981376	4.0	100	Pass
Temperature: +20°	5319.973395	5319.981376	1.5	100	Pass
Temperature: +10°	5319.992018	5319.981376	2.0	100	Pass
Temperature: 0°	5320.005321	5319.981376	4.5	100	Pass

FREQUENCY STABILITY

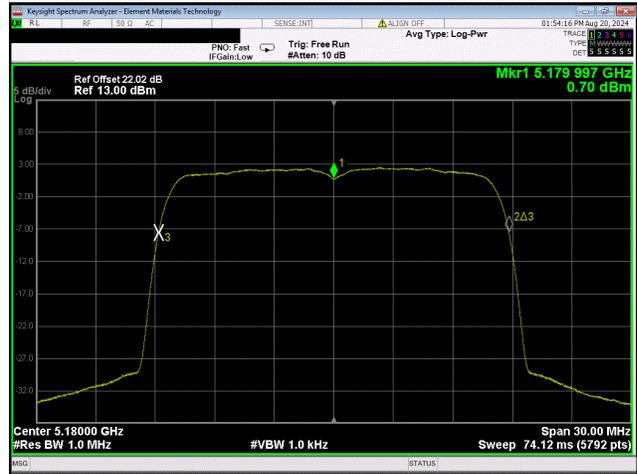


	Measured Value (MHz)	Nominal Value (MHz)	Error (PPM)	Limit (PPM)	Results
5470 MHz - 5725 MHz - Low Channel, 5500 MHz					
Voltage: 30 VAC	5499.980748	5499.980748	0.0	100	Pass
Voltage: 100% (24 VAC)	5499.980748	5499.980748	0.0	100	Pass
Voltage: 18 VAC	5499.977998	5499.980748	0.5	100	Pass
Temperature: +50°	5499.966997	5499.980748	2.5	100	Pass
Temperature: +40°	5499.964246	5499.980748	3.0	100	Pass
Temperature: +30°	5499.964246	5499.980748	3.0	100	Pass
Temperature: +20°	5499.980748	5499.980748	0.0	100	Pass
Temperature: +10°	5499.994499	5499.980748	2.5	100	Pass
Temperature: 0°	5500.013751	5499.980748	6.0	100	Pass
5470 MHz - 5725 MHz - High Channel, 5700 MHz					
Voltage: 30 VAC	5699.968643	5699.971494	0.5	100	Pass
Voltage: 100% (24 VAC)	5699.971494	5699.971494	0.0	100	Pass
Voltage: 18 VAC	5699.971494	5699.971494	0.0	100	Pass
Temperature: +50°	5699.965792	5699.971494	1.0	100	Pass
Temperature: +40°	5699.960091	5699.971494	2.0	100	Pass
Temperature: +30°	5699.965792	5699.971494	1.0	100	Pass
Temperature: +20°	5699.971494	5699.971494	0.0	100	Pass
Temperature: +10°	5699.988597	5699.971494	3.0	100	Pass
Temperature: 0°	5700.014253	5699.971494	7.5	100	Pass
5725 MHz - 5850 MHz - High Channel, 5825 MHz					
Voltage: 30 VAC	5824.965042	5824.962129	0.5	100	Pass
Voltage: 100% (24 VAC)	5824.962129	5824.962129	0.0	100	Pass
Voltage: 18 VAC	5824.962129	5824.962129	0.0	100	Pass
Temperature: +50°	5824.965042	5824.962129	0.5	100	Pass
Temperature: +40°	5824.953389	5824.962129	1.5	100	Pass
Temperature: +30°	5824.956302	5824.962129	1.0	100	Pass
Temperature: +20°	5824.976695	5824.962129	2.5	100	Pass
Temperature: +10°	5824.976695	5824.962129	2.5	100	Pass
Temperature: 0°	5825.005826	5824.962129	7.5	100	Pass

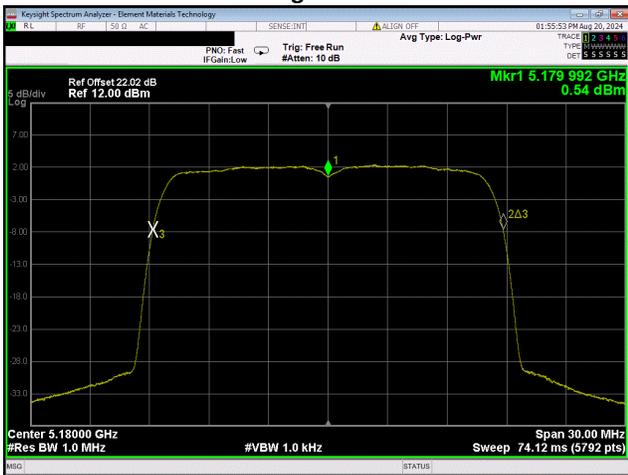
FREQUENCY STABILITY



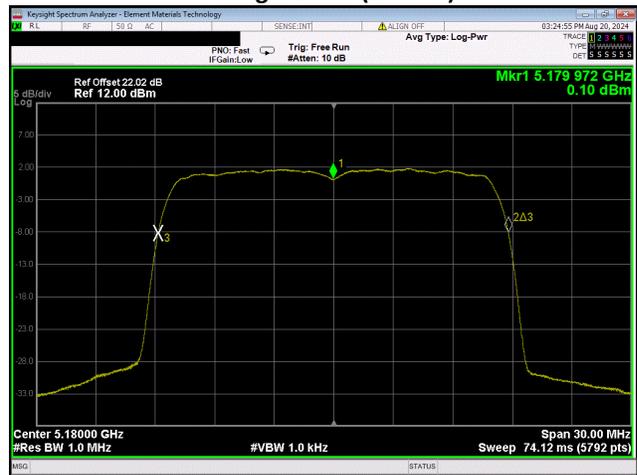
5150 MHz - 5250 MHz - Low Channel, 5180 MHz
Voltage: 30 VAC



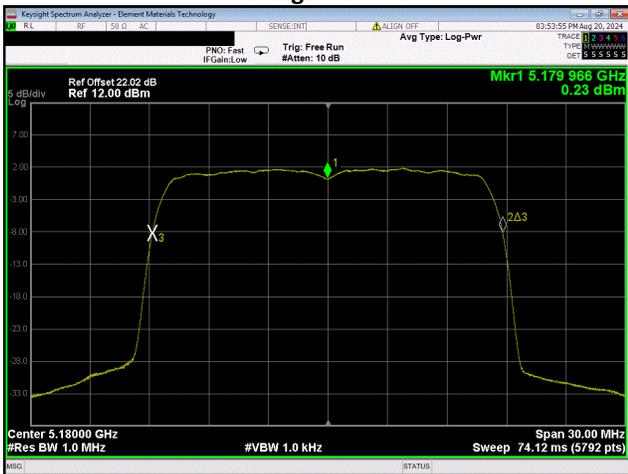
5150 MHz - 5250 MHz - Low Channel, 5180 MHz
Voltage: 100% (24 VAC)



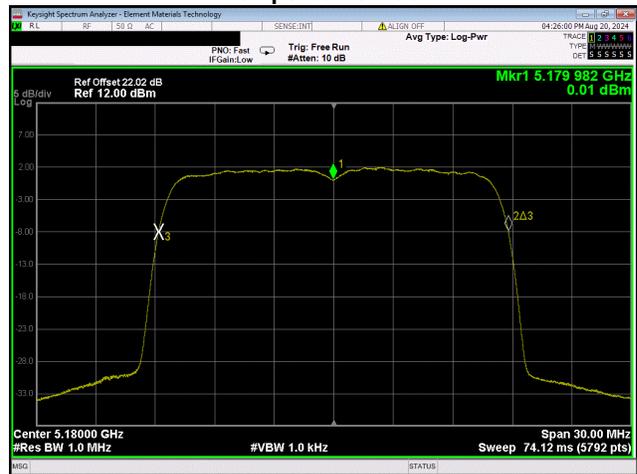
5150 MHz - 5250 MHz - Low Channel, 5180 MHz
Voltage: 18 VAC



5150 MHz - 5250 MHz - Low Channel, 5180 MHz
Temperature: +50°

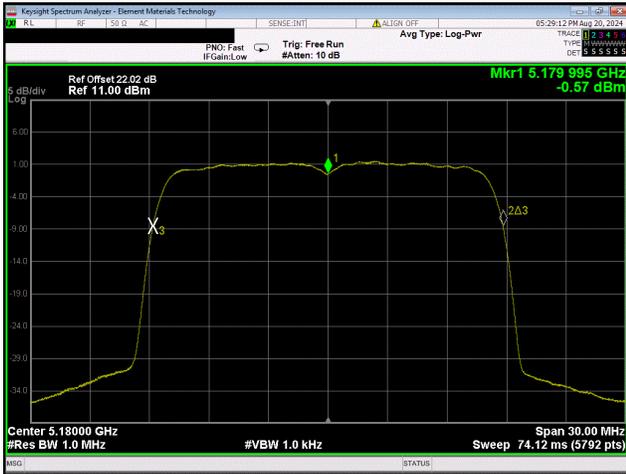


5150 MHz - 5250 MHz - Low Channel, 5180 MHz
Temperature: +40°

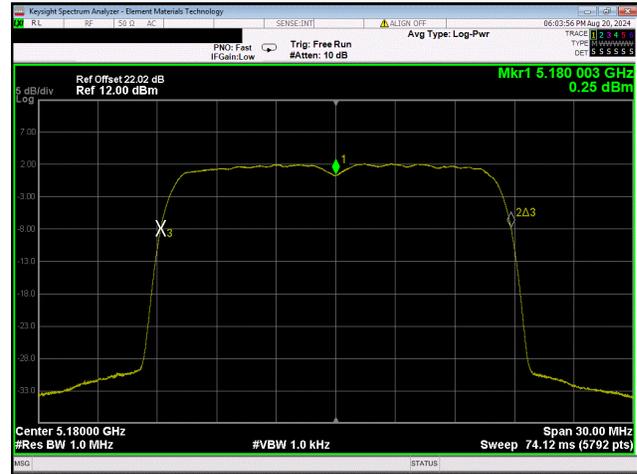


5150 MHz - 5250 MHz - Low Channel, 5180 MHz
Temperature: +30°

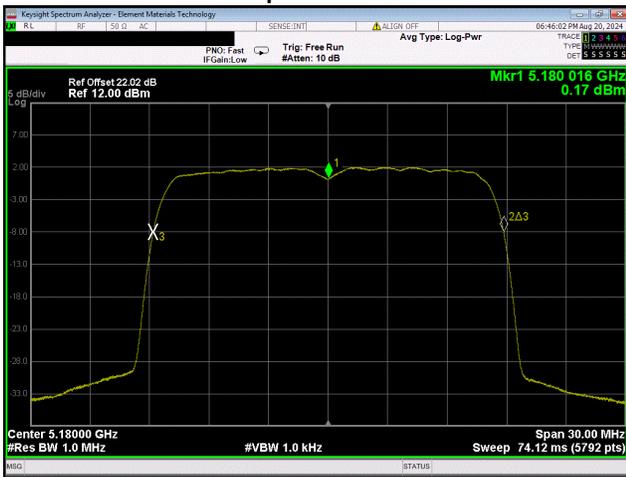
FREQUENCY STABILITY



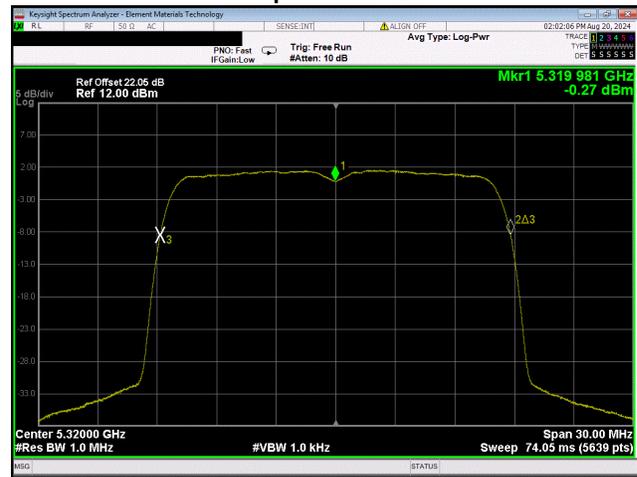
5150 MHz - 5250 MHz - Low Channel, 5180 MHz
Temperature: +20°



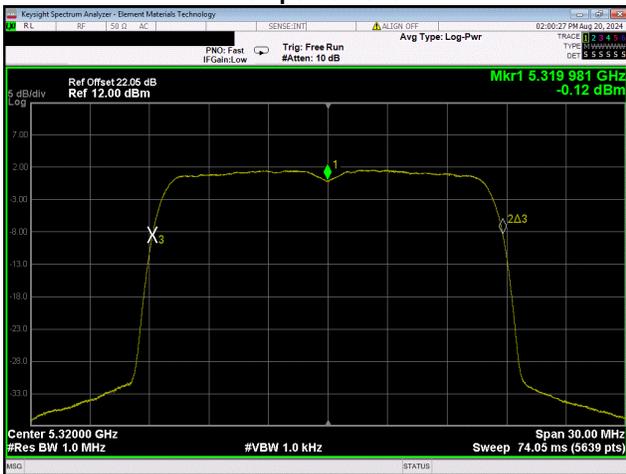
5150 MHz - 5250 MHz - Low Channel, 5180 MHz
Temperature: +10°



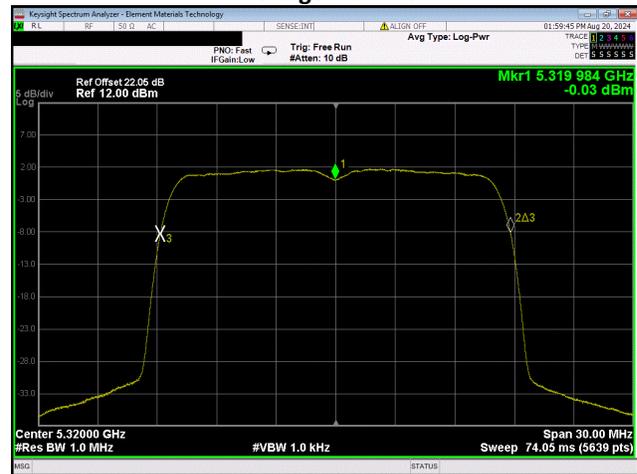
5150 MHz - 5250 MHz - Low Channel, 5180 MHz
Temperature: 0°



5250 MHz - 5350 MHz - High Channel, 5320 MHz
Voltage: 30 VAC

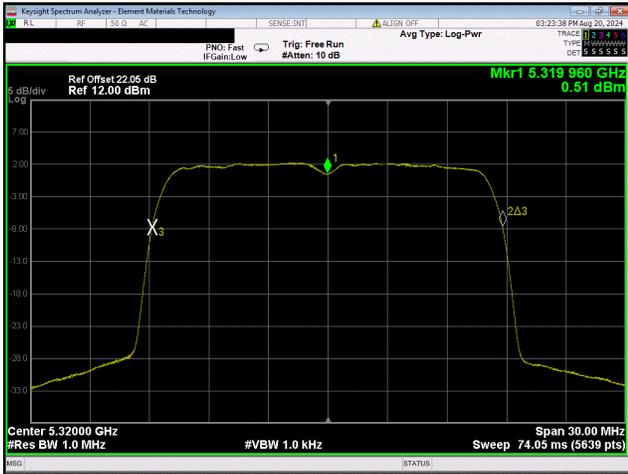


5250 MHz - 5350 MHz - High Channel, 5320 MHz
Voltage: 100% (24 VAC)

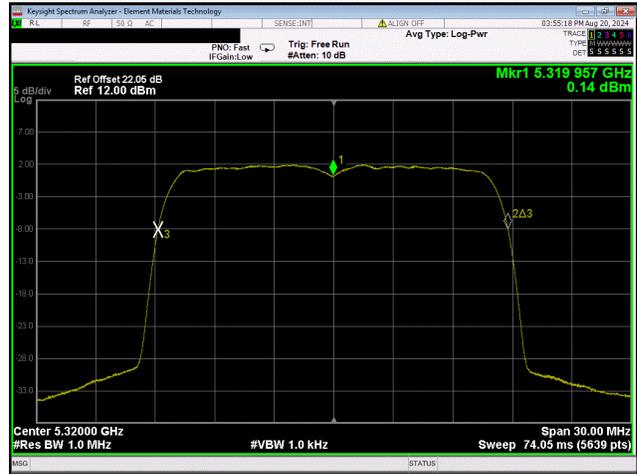


5250 MHz - 5350 MHz - High Channel, 5320 MHz
Voltage: 18 VAC

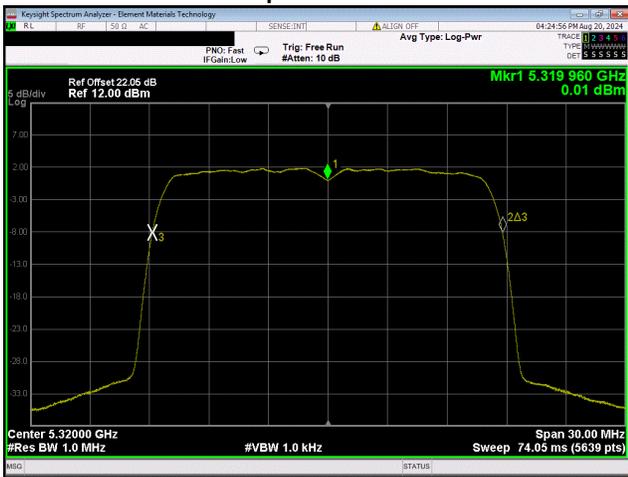
FREQUENCY STABILITY



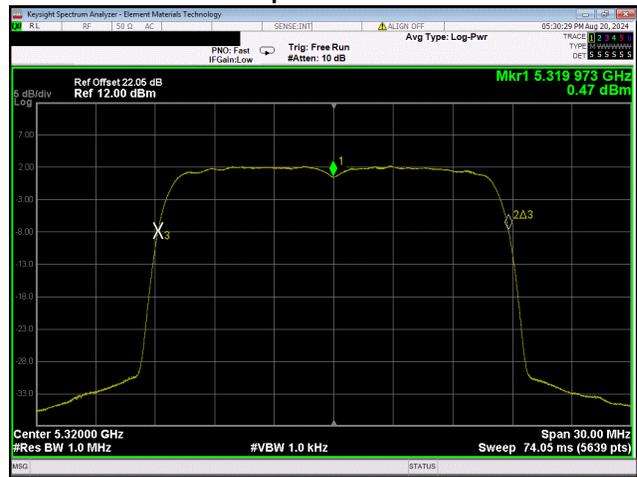
5250 MHz - 5350 MHz - High Channel, 5320 MHz
Temperature: +50°



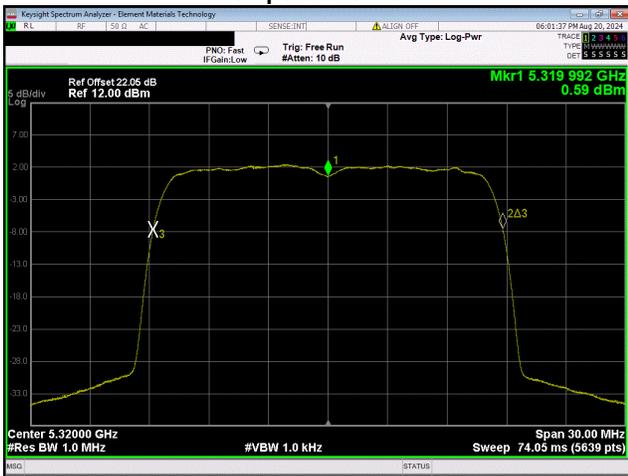
5250 MHz - 5350 MHz - High Channel, 5320 MHz
Temperature: +40°



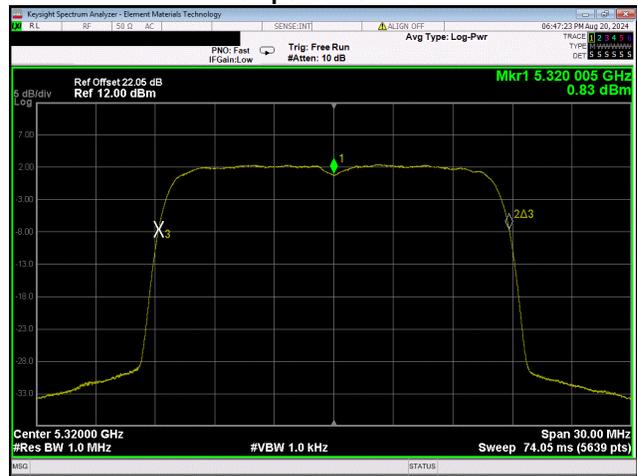
5250 MHz - 5350 MHz - High Channel, 5320 MHz
Temperature: +30°



5250 MHz - 5350 MHz - High Channel, 5320 MHz
Temperature: +20°

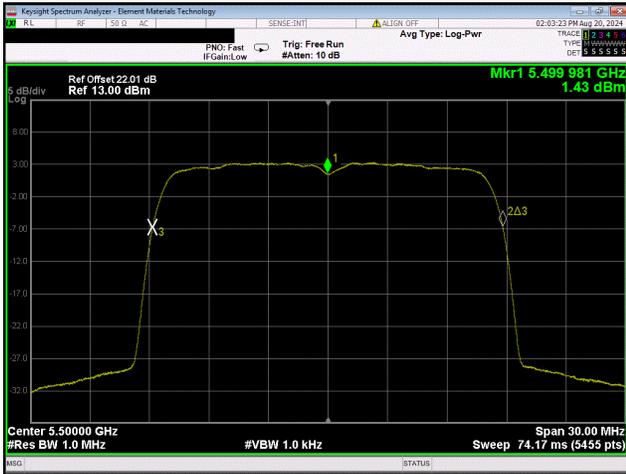


5250 MHz - 5350 MHz - High Channel, 5320 MHz
Temperature: +10°

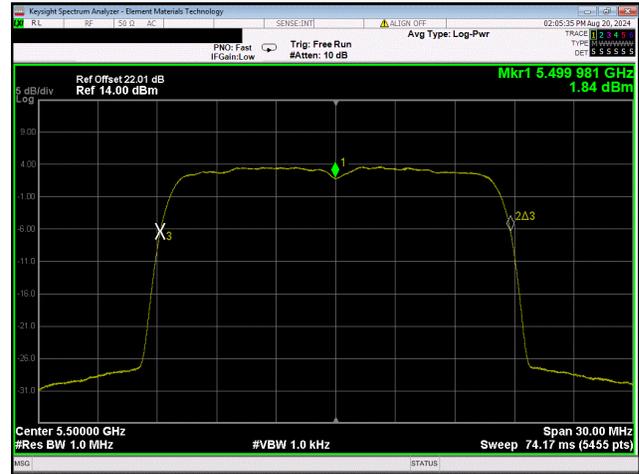


5250 MHz - 5350 MHz - High Channel, 5320 MHz
Temperature: 0°

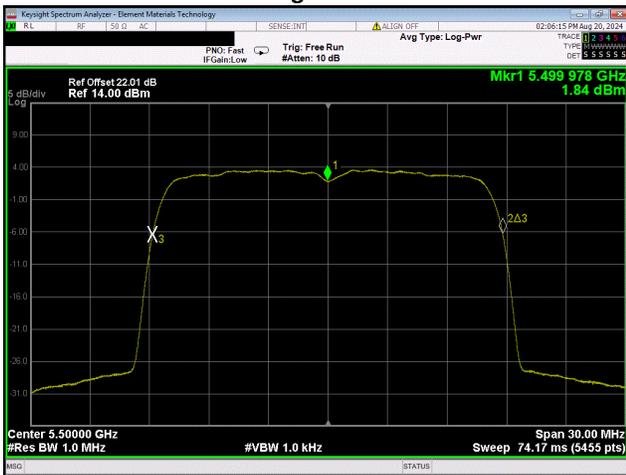
FREQUENCY STABILITY



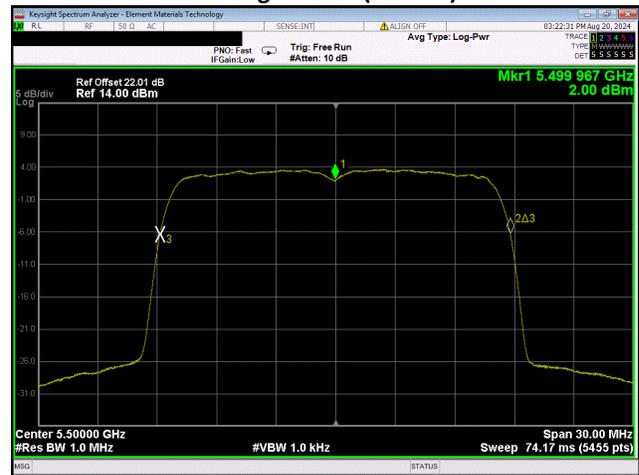
5470 MHz - 5725 MHz - Low Channel, 5500 MHz
Voltage: 30 VAC



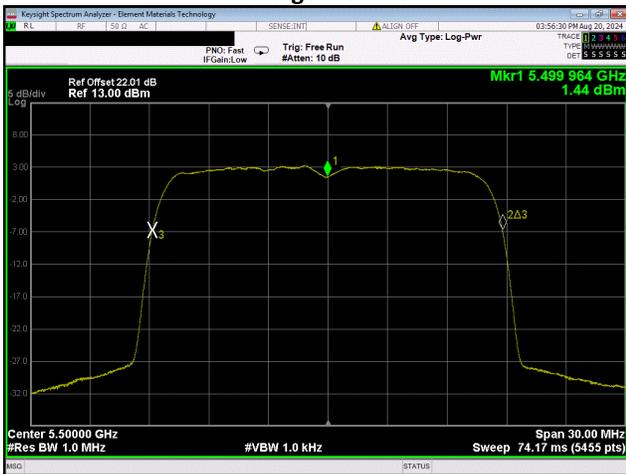
5470 MHz - 5725 MHz - Low Channel, 5500 MHz
Voltage: 100% (24 VAC)



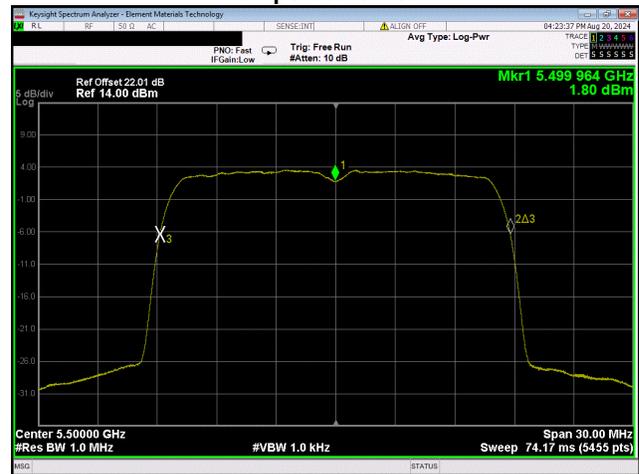
5470 MHz - 5725 MHz - Low Channel, 5500 MHz
Voltage: 18 VAC



5470 MHz - 5725 MHz - Low Channel, 5500 MHz
Temperature: +50°

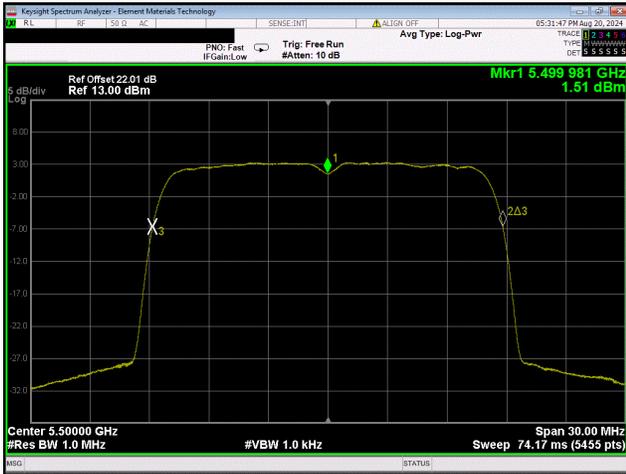


5470 MHz - 5725 MHz - Low Channel, 5500 MHz
Temperature: +40°

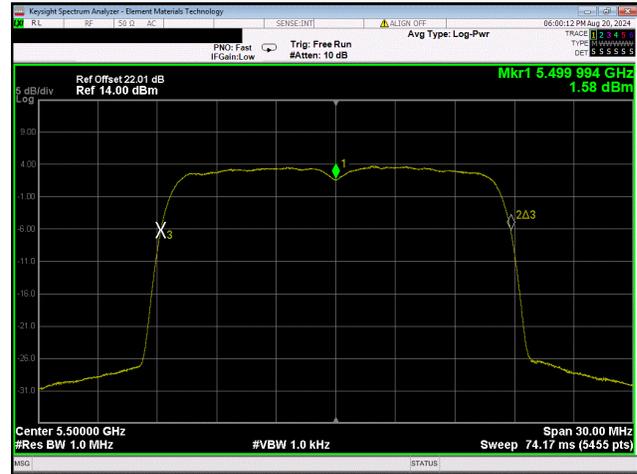


5470 MHz - 5725 MHz - Low Channel, 5500 MHz
Temperature: +30°

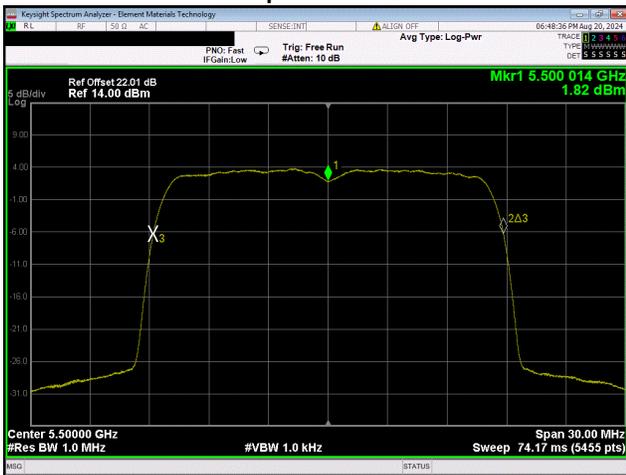
FREQUENCY STABILITY



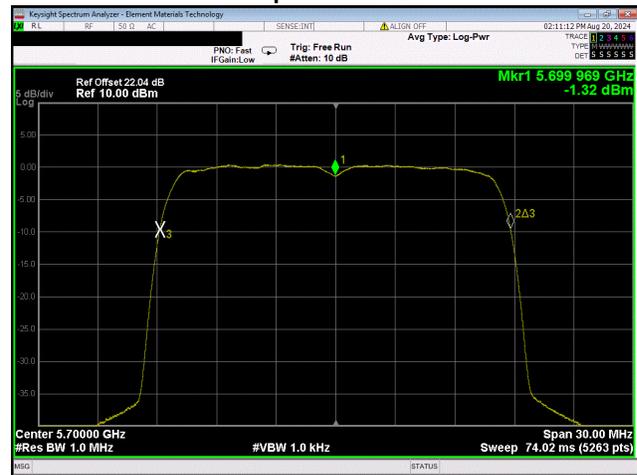
5470 MHz - 5725 MHz - Low Channel, 5500 MHz
 Temperature: +20°



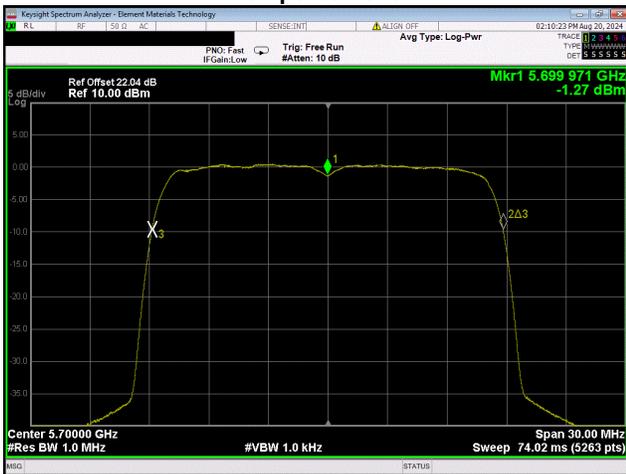
5470 MHz - 5725 MHz - Low Channel, 5500 MHz
 Temperature: +10°



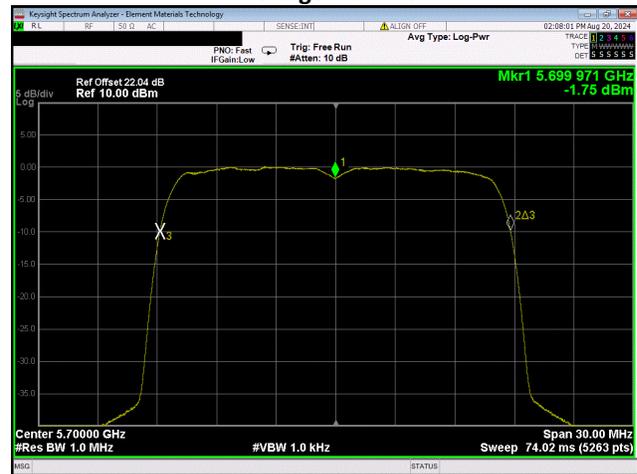
5470 MHz - 5725 MHz - Low Channel, 5500 MHz
 Temperature: 0°



5470 MHz - 5725 MHz - High Channel, 5700 MHz
 Voltage: 30 VAC

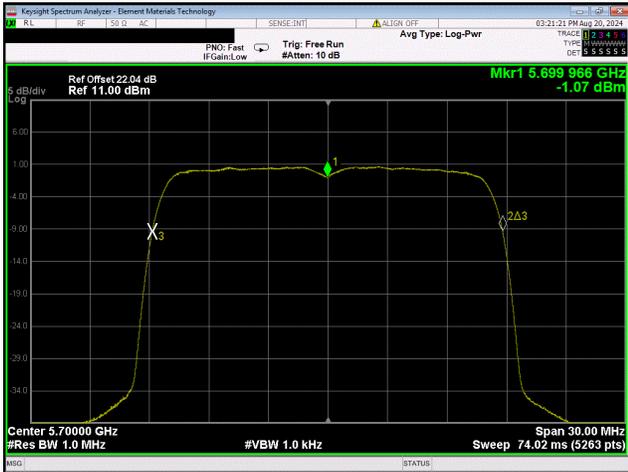


5470 MHz - 5725 MHz - High Channel, 5700 MHz
 Voltage: 100% (24 VAC)

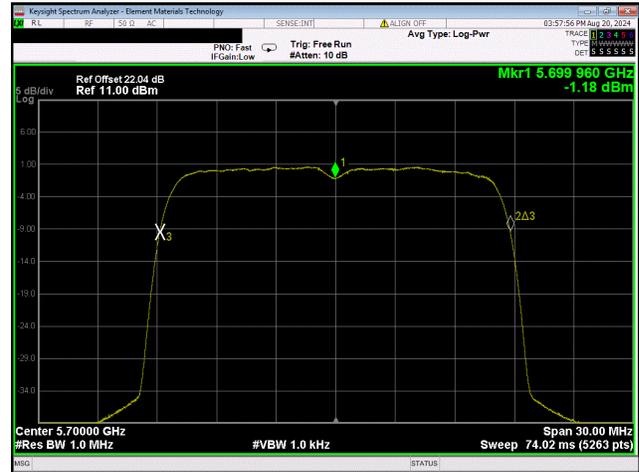


5470 MHz - 5725 MHz - High Channel, 5700 MHz
 Voltage: 18 VAC

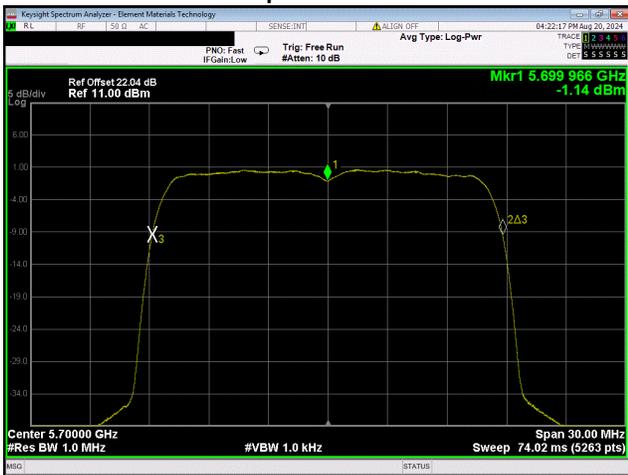
FREQUENCY STABILITY



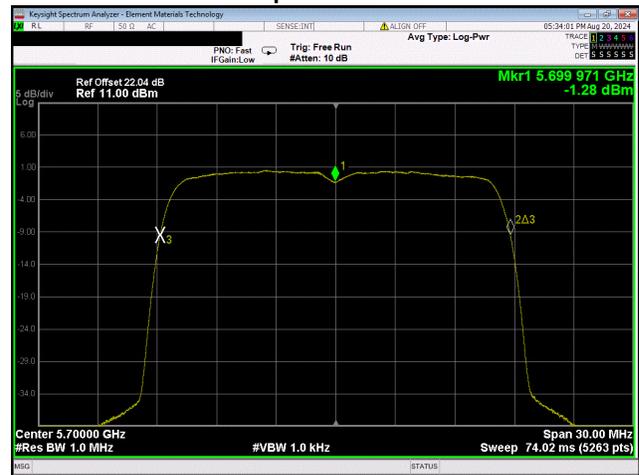
5470 MHz - 5725 MHz - High Channel, 5700 MHz
Temperature: +50°



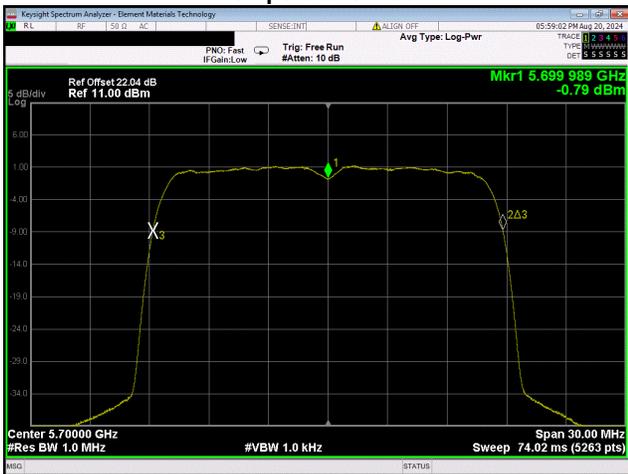
5470 MHz - 5725 MHz - High Channel, 5700 MHz
Temperature: +40°



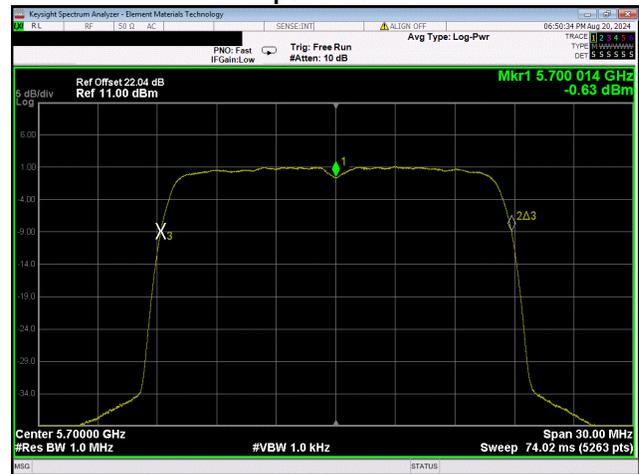
5470 MHz - 5725 MHz - High Channel, 5700 MHz
Temperature: +30°



5470 MHz - 5725 MHz - High Channel, 5700 MHz
Temperature: +20°

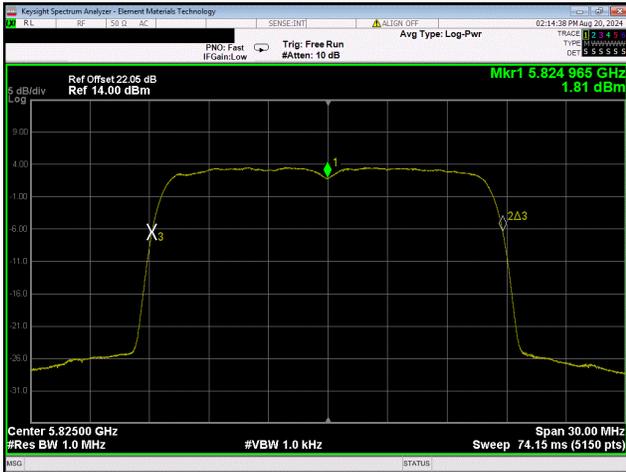


5470 MHz - 5725 MHz - High Channel, 5700 MHz
Temperature: +10°

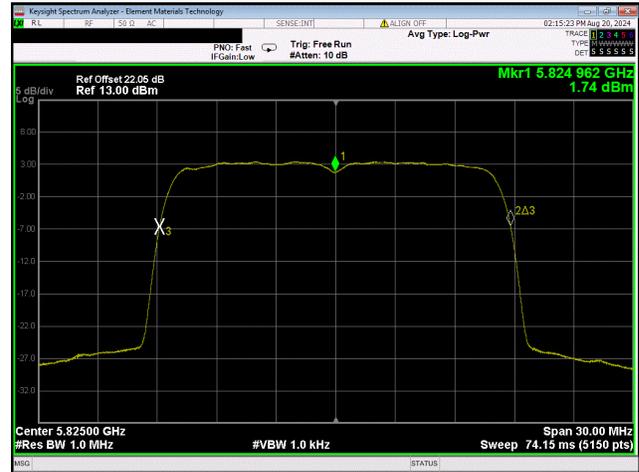


5470 MHz - 5725 MHz - High Channel, 5700 MHz
Temperature: 0°

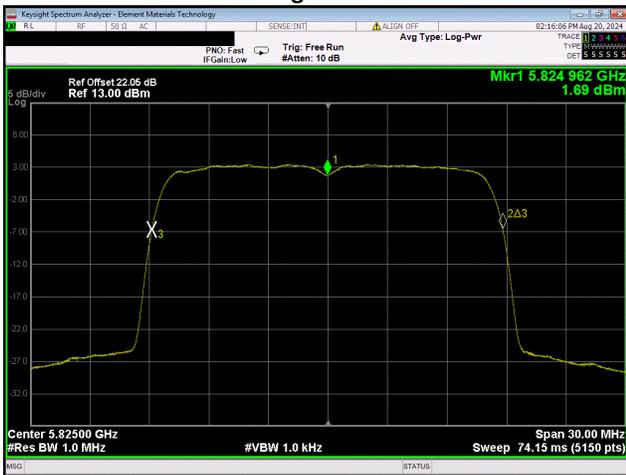
FREQUENCY STABILITY



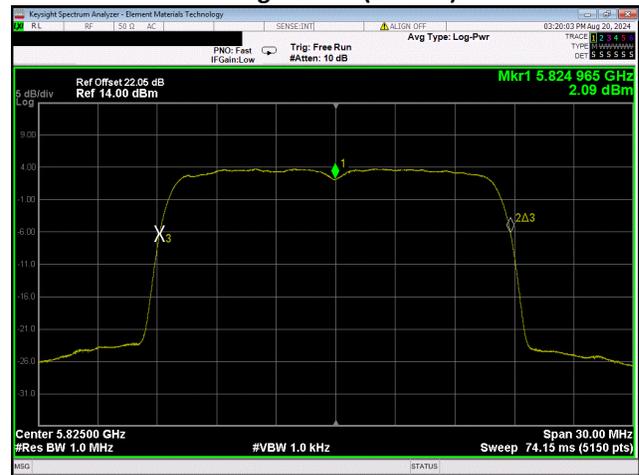
5725 MHz - 5850 MHz - High Channel, 5825 MHz
Voltage: 30 VAC



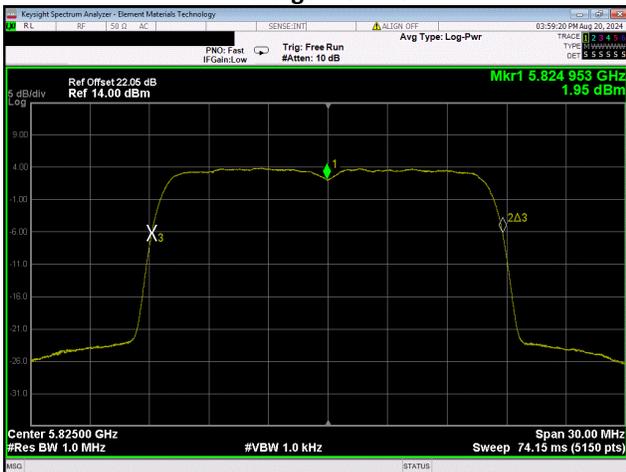
5725 MHz - 5850 MHz - High Channel, 5825 MHz
Voltage: 100% (24 VAC)



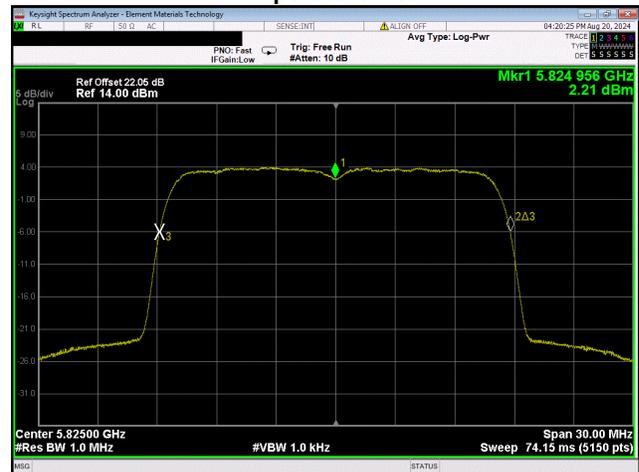
5725 MHz - 5850 MHz - High Channel, 5825 MHz
Voltage: 18 VAC



5725 MHz - 5850 MHz - High Channel, 5825 MHz
Temperature: +50°

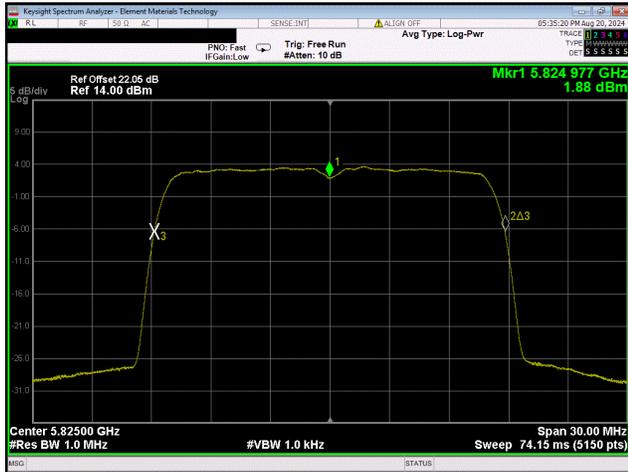


5725 MHz - 5850 MHz - High Channel, 5825 MHz
Temperature: +40°

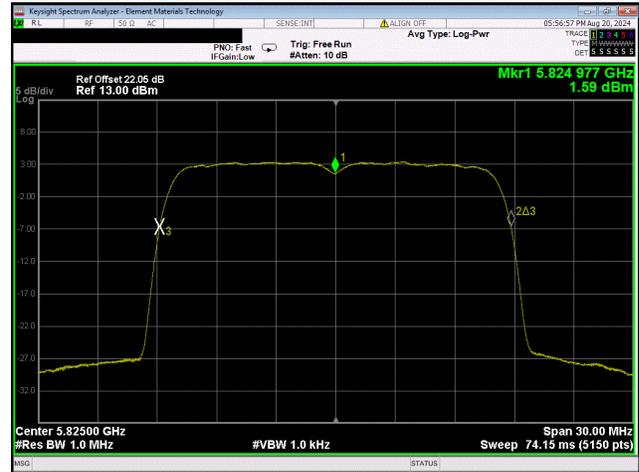


5725 MHz - 5850 MHz - High Channel, 5825 MHz
Temperature: +30°

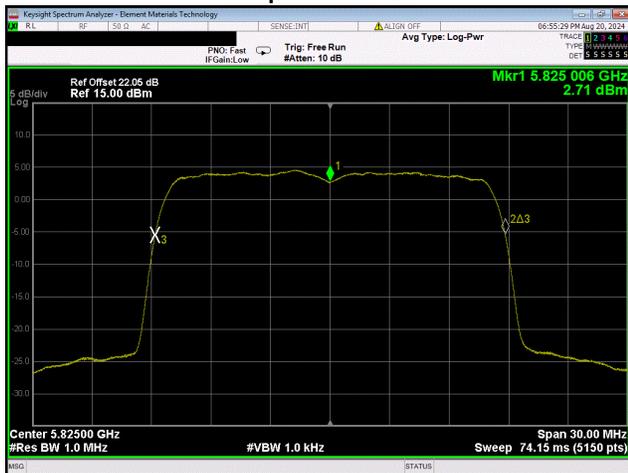
FREQUENCY STABILITY



5725 MHz - 5850 MHz - High Channel, 5825 MHz
 Temperature: +20°



5725 MHz - 5850 MHz - High Channel, 5825 MHz
 Temperature: +10°



5725 MHz - 5850 MHz - High Channel, 5825 MHz
 Temperature: 0°