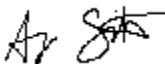
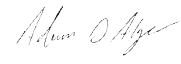


Test Report TR3609A

Equipment Under Test:	Latch PCB
Requirement(s):	FCC: 15.247
Test Date(s):	3/28/2023 – 12/4/2023
Prepared for:	Eberhard Attn: Rob Pliml 21944 Drake Road Strongsville, OH 44149

Report Issued by: Anthony Smith, EMC Engineering Specialist	
Signature: 	Date: 1/19/2024
Report Reviewed by: Adam Alger, Laboratory Manager	
Signature: 	Date: 1/19/2024
Report Constructed by: Anthony Smith, EMC Engineering Specialist	
Signature: 	Date: 12/5/2023

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Company: Eberhard	Page 1 of 30	Name: Latch PCB
Report: TR3609A		Model: 17240-25
Quote: NBO-04-2022-004907		Serial: Engineering Sample

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Laird Connectivity Test Services in Review

The Laird Connectivity LLC laboratory located at W66 N220 Commerce Court Cedarburg, Wisconsin, 53012 USA is recognized through the following organizations:



A2LA – American Association for Laboratory Accreditation

Accreditation based on ISO/IEC 17025:2017 with Electrical (EMC) Scope

A2LA Certificate Number: 1255.01

Scope of accreditation includes all test methods listed herein unless otherwise noted



Federal Communications Commission (FCC) – USA

Accredited Test Firm Registration Number: 953492

Recognition of two 3 meter Semi-Anechoic Chambers



Innovation, Science and Economic Development Canada

Accredited U.S. Identification Number: US0218

Recognition of two 3 meter Semi-Anechoic Chambers

Company: Eberhard	Page 3 of 30	Name: Latch PCB
Report: TR3609A		Model: 17240-25
Quote: NBO-04-2022-004907		Serial: Engineering Sample

1 TEST REPORT SUMMARY

During **March 28th, 2023 to December 4th, 2023** the Equipment Under Test (EUT), **Latch PCB**, as provided by **Eberhard** was tested to the following requirements:

FCC 15.247 DTS

Requirements	Description	Specification	Method	Result
FCC: 15.247 (a)(2)	Digital Modulation System 6 dB bandwidth	500 kHz	ANSI C63.10	Pass
FCC: 2.1049	Occupied Bandwidth	Reported	ANSI C63.10	Pass
FCC: 15.247 (b)(3)	Maximum Conducted Output Power	30 dBm	ANSI C63.10	Pass
FCC: 15.247 (e)	Digital Modulation System Power Spectral Density	8 dBm / 3 kHz	ANSI C63.10	Pass
FCC: 15.247 (d)	RF Spurious Emissions at the Transmitter Antenna Terminal	20 dBc	ANSI C63.10	Pass
FCC: 15.247 (d)	Spurious Radiated Emissions in Restricted Bands	FCC 15.209 RSS-GEN 8.9	ANSI C63.10	Pass
FCC: 2.1055 (d)	Frequency Stability	Reported	ANSI C63.10	Pass

Notice:

The results relate only to the item tested as configured and described in this report. Any additional configurations, modes of operation, or modifications made to the equipment under test after the specified test date(s) are at the decision of the client and may not apply to the data seen in this test report.

The decision rule for Pass / Fail assessment to the specification or standard listed in this test report has been agreed upon by the client and laboratory to be as follows:

Measurement Type	Rule
Emissions – Amplitude	1 dB below specified limit
Emissions – Frequency	1% less than the specification
Immunity	Tested at specified level

2 CLIENT INFORMATION

Company Name	Eberhard
Contact Person	Rob Pliml
Address	21944 Drake Road Strongsville, OH 44149

2.1 Equipment Under Test (EUT) Information

The following information has been supplied by the client

Product Name	Latch PCB
Model Number	17240-25
Serial Number	Engineering Sample
FCC ID	2BATJ-1724058

2.2 Product Description

Latch PCB

2.3 Modifications Incorporated for Compliance

None noted at time of test

2.4 Deviations and Exclusions from Test Specifications

None noted at time of test

2.5 Additional Information

Device programmed via USB micro to UART board to UART serial connection to PCB utilizing “YAT” terminal emulation software version 2.5.0. Device powered via 12V Battery. Device uses Bluetooth Low Energy with 1M data rate. Power Setting 2 used for final compliance.

Antenna is an “Inverted F” trace antenna with a peak gain of 3.2 dBi (see TR3609D).

3 REFERENCES

Publication	Date
FCC eCFR	2023
ANSI C63.10	2013

4 UNCERTAINTY SUMMARY

Using the guidance of the following publications the calculated measurement uncertainty represents an expanded uncertainty expressed at approximately the 95 % confidence level, using a coverage factor of $k = 2$.

References
CISPR 16-4-1
CISPR 16-4-2
CISPR 32
ANSI C63.23
A2LA P103
A2LA P103c
ETSI TR 100-028

Measurement Type	Configuration	Uncertainty $\pm$
Radiated Emissions	Biconical Antenna	5.0 dB
Radiated Emissions	Log Periodic Antenna	5.3 dB
Radiated Emissions	Horn Antenna	4.7 dB
AC Line Conducted Emissions	Artificial Mains Network	3.4 dB
Telecom Conducted Emissions	Asymmetric Artificial Network	4.9 dB
Disturbance Power Emissions	Absorbing Clamp	4.1 dB
Radiated Immunity	3 Volts/meter	2.2 dB
Conducted Immunity	CDN/EM/BCI	2.4/3.5/3.4 dB
EFT Burst/Surge	Peak pulse voltage	164 volts
ESD Immunity	15 kV level	1377 Volts

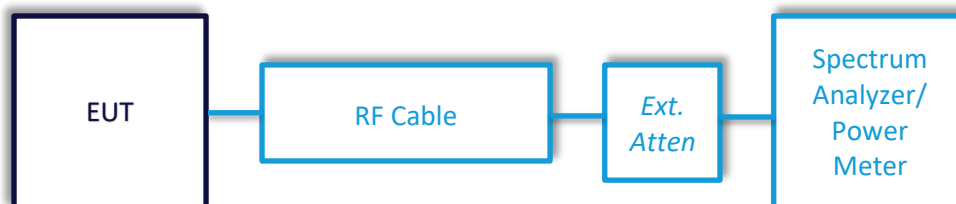
Parameter	ETSI U.C. $\pm$	U.C. $\pm$
Radio Frequency, from F0	1×10^{-7}	0.55×10^{-7}
Occupied Channel Bandwidth	5 %	2 %
RF conducted Power (Power Meter)	1.5 dB	1.2 dB
RF conducted emissions (Spectrum Analyzer)	3.0 dB	1.7 dB
All emissions, radiated	6.0 dB	5.3 dB
Temperature	1° C	0.65° C
Humidity	5 %	2.9 %
Supply voltages	3 %	1 %

5 TEST DATA

5.1 Antenna Port Conducted Emissions

Description of Measurement	The direct measurement of emissions at the antenna port of the EUT is achieved by use of a RF connection to a spectrum analyzer or power meter. The cable and attenuator factors are loaded into the analyzer or power meter allowing for direct measurement readings without the need for further corrections.
Example Calculations	Measurement (dBm) + Cable factor (dB) + External Attenuator (dB) = Corrected Reading (dBm) Margin (dB) = Limit (dBm) – Corrected Reading (dBm)

Block Diagram



Instrumentation

Asset #	Description	Manufacturer	Model #	Serial #	Date	Due Date	Status
AA 960172	Cable	A.H. Systems, Inc.	SAC-26G-1	387	3/22/2023	3/22/2024	Active Verification
EE 960085	Analyzer - EMI Receiver	Agilent	N9038A	MY51210148	4/11/2023	4/11/2024	Active Calibration
EE 960203	Analyzer - EMI Receiver	Keysight	N9038A	MY56400072	4/13/2023	4/13/2024	Active Calibration

5.1.1 Antenna Port Conducted Emissions – 6dB DTS Bandwidth

Operator	Anthony Smith	QA	Adam Alger
Temperature	21.9, 22.5, 22.9°C	R.H. %	31.8, 34.3, 39.9%
Test Date	4/10/2023, 4/12/2023, 4/13/2023	Location	Chamber 3
Requirement	FCC: 15.247 (a)(2)	Method	ANSI C63.10 §11.8

Limits: BW Greater than 500 kHz

Test Parameters

Frequency	2402, 2440, 2480 MHz	Setup	Conducted
RBW	100 kHz	VBW	300 kHz
Detector(s)	Max Peak Hold	Sweep Time	Auto

EUT Parameters

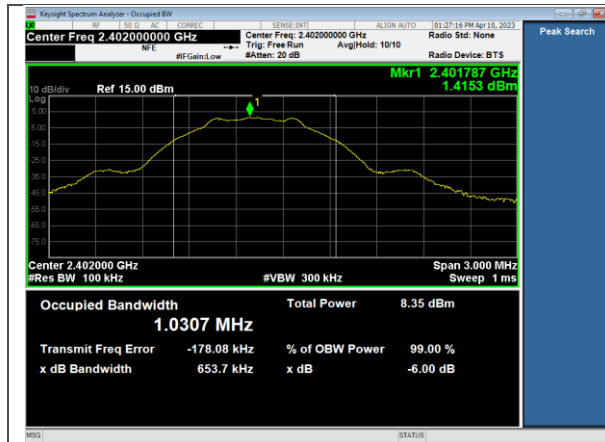
Input Power	12VDC (Battery)	Mode	BLE Transmit
Frequency	2402, 2440, 2480 MHz	Channel	37, 17, 39
Data Rate / Modulation	BLE 1Mbps		

Data

Table

Channel	Data Rate	DTS BW (kHz)	Limit (kHz)	Margin (kHz)
37	BLE 1Mbps	653.7	500.0	153.7
17	BLE 1Mbps	655.3	500.0	155.3
39	BLE 1Mbps	654.3	500.0	154.3

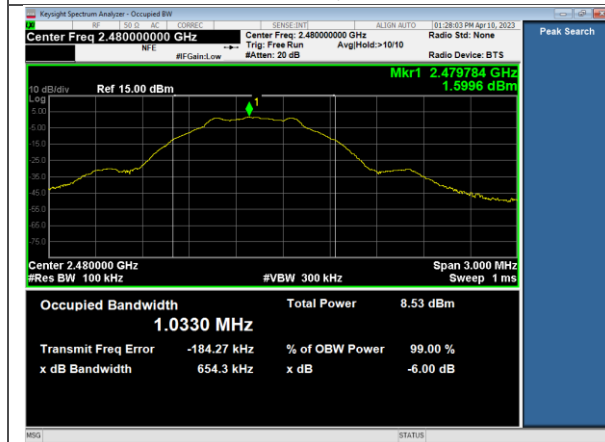
Plots



DTS Bandwidth, Channel 37



DTS Bandwidth, Channel 17



DTS Bandwidth, Channel 39

Company: Eberhard	Page 10 of 30	Name: Latch PCB
Report: TR3609A		Model: 17240-25
Quote: NBO-04-2022-004907		Serial: Engineering Sample

5.1.2 Antenna Port Conducted Emissions – 99% Occupied Bandwidth

Operator	Anthony Smith	QA	Adam Alger
Temperature	21.9, 22.5, 22.9°C	R.H. %	31.8, 34.3, 39.9%
Test Date	4/10/2023, 4/12/2023, 4/13/2023	Location	Chamber 3
Requirement	FCC: 2.1049	Method	ANSI C63.10 §6.9

Limits: Reported

Test Parameters

Frequency	2402, 2440, 2480 MHz	Setup	Conducted
RBW	30 kHz	VBW	100 kHz
Detector(s)	Max Peak Hold	Sweep Time	Auto

EUT Parameters

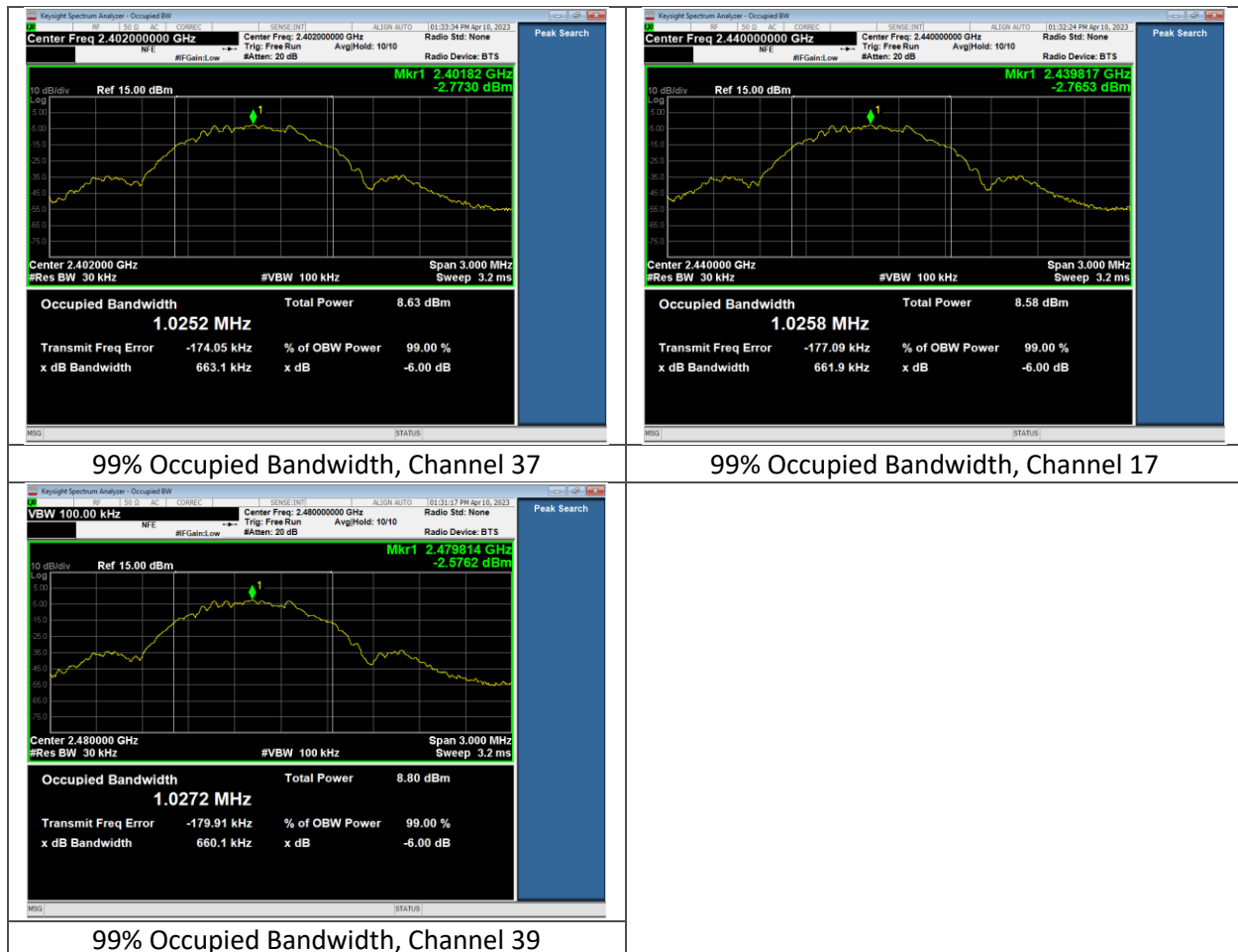
Input Power	12VDC (Battery)	Mode	BLE Transmit
Frequency	2402, 2440, 2480 MHz	Channel	37, 17, 39
Data Rate / Modulation	BLE 1Mbps		

Data

Table

Channel	Data Rate	99% OBW (MHz)
37	BLE 1Mbps	1.03
17	BLE 1Mbps	1.03
39	BLE 1Mbps	1.03

Plots



5.1.3 Antenna Port Conducted Emissions – Max Conducted Output Power

Operator	Anthony Smith	QA	Adam Alger
Temperature	21.9, 22.5, 22.9°C	R.H. %	31.8, 34.3, 39.9%
Test Date	4/10/2023, 4/12/2023, 4/13/2023	Location	Chamber 3
Requirement	FCC: 15.247 (b)(3)	Method	ANSI C63.10 §11.9

Limits: <30 dBm

Test Parameters

Frequency	2402, 2440, 2480 MHz	Setup	Conducted
RBW	3 MHz	VBW	50 MHz
Detector(s)	Max Peak Hold	Sweep Time	Auto

EUT Parameters

Input Power	12VDC (Battery)	Mode	BLE Transmit
Frequency	2402, 2440, 2480 MHz	Channel	37, 17, 39
Data Rate / Modulation	BLE 1Mbps	Transmit Power Setting	2

Data

Table

Channel	Data Rate	Transmit Power Setting	Peak Output Power (dBm)	Limit (dBm)	Margin (dB)
37	BLE 1Mbps	2	-0.4	30.0	30.4
17	BLE 1Mbps	2	-0.1	30.0	30.1
39	BLE 1Mbps	2	0.1	30.0	29.9

5.1.4 Antenna Port Conducted Emissions – Peak Power Spectral Density

Operator	Anthony Smith	QA	Adam Alger
Temperature	21.9, 22.5, 22.9°C	R.H. %	31.8, 34.3, 39.9%
Test Date	4/10/2023, 4/12/2023, 4/13/2023	Location	Chamber 3
Requirement	FCC: 15.247 (e)	Method	ANSI C63.10 §11.10

Limits: 8dBm/3kHz

Test Parameters

Frequency	2402, 2440, 2480 MHz	Setup	Conducted
RBW	100 kHz	VBW	300 kHz
Detector(s)	Max Peak Hold	Sweep Time	Auto

EUT Parameters

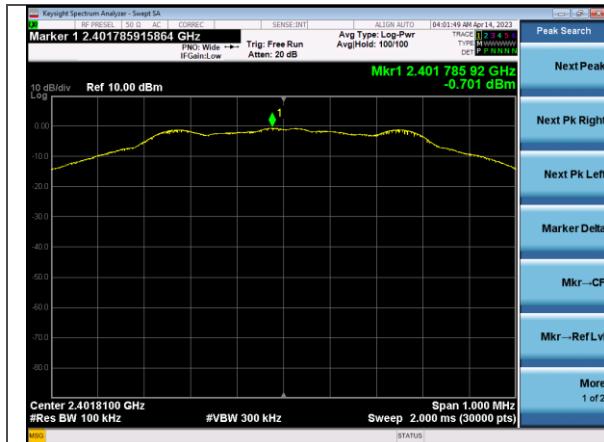
Input Power	12VDC (Battery)	Mode	BLE Transmit
Frequency	2402, 2440, 2480 MHz	Channel	37, 17, 39
Data Rate / Modulation	BLE 1Mbps	Transmit Power Setting	2

Data

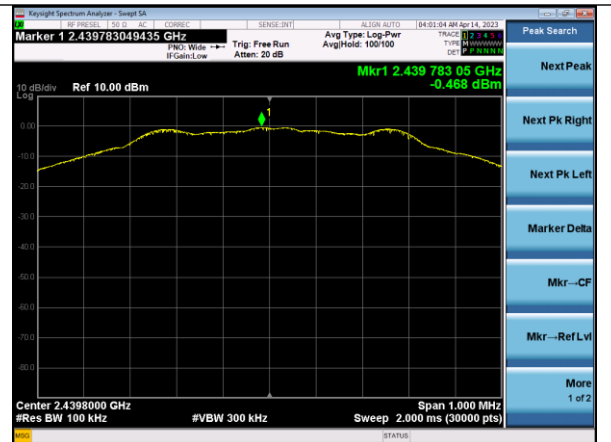
Table

Channel	Data Rate	PSD Reading (dBm/100 kHz)	Limit (dBm/3 kHz)	Margin (dB)
37	BLE 1Mbps	-0.7	8.0	8.7
17	BLE 1Mbps	-0.5	8.0	8.5
39	BLE 1Mbps	-0.3	8.0	8.3

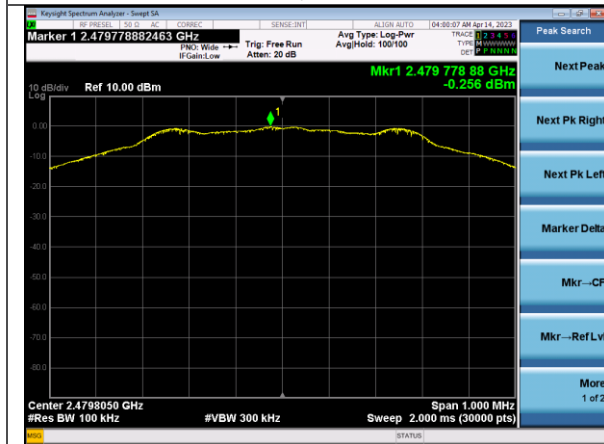
Plots



Peak PSD, Channel 37



Peak PSD, Channel 17



Peak PSD, Channel 39

5.1.5 Antenna Port Conducted Emissions – RF Spurious Emissions at the Antenna Port

Operator	Anthony Smith	QA	Adam Alger
Temperature	21.9, 22.5, 22.9, 21.4°C	R.H. %	31.8, 34.3, 39.9, 46.1%
Test Date	4/10/2023, 4/12/2023, 4/13/2023, 8/17/2023	Location	Chamber 3
Requirement	FCC: 15.247 (d)	Method	ANSI C63.10 §11.11

Limits: 20 dBc

Reference Level = -0.3 dBm

Limit = -20.3 dBm

Test Parameters

Frequency	30 MHz – 25 GHz	Setup	Conducted
RBW	100 kHz	VBW	300 kHz
Detector(s)	Max Peak Hold	Sweep Time	Auto
Limit Calculation	Reference Level (dBm) – 20 dB = Limit (dBm)		

EUT Parameters

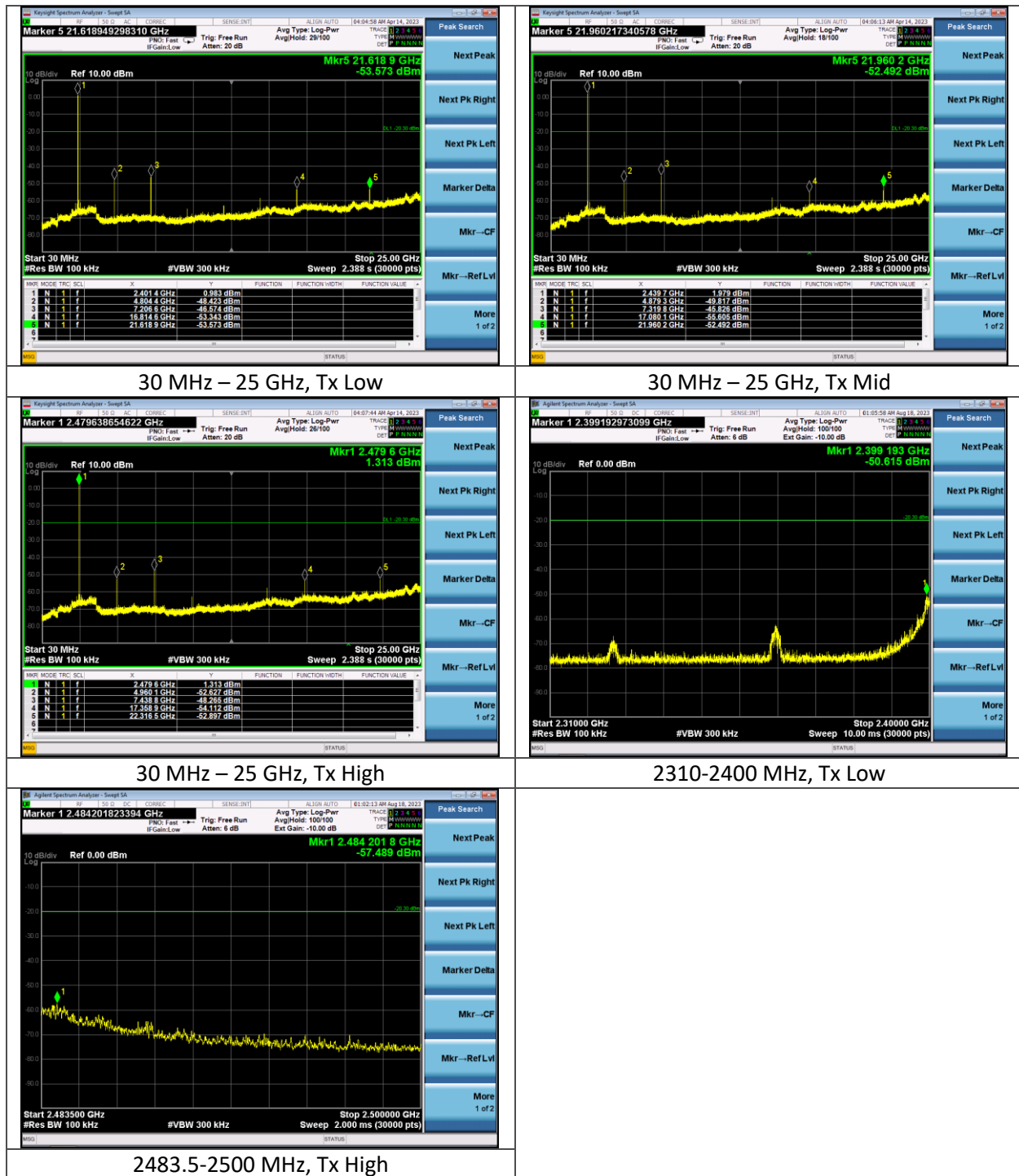
Input Power	12VDC (Battery)	Mode	BLE Transmit
Frequency	2402, 2440, 2480 MHz	Channel	37, 17, 39
Data Rate / Modulation	BLE 1Mbps	Transmit Power Setting	2

Data

Table

Frequency (MHz)	Emission Measurement (dBm)	Limit (dBm)	Margin (dB)	Channel
4804.4	-48.4	-20.3	28.1	37
7206.6	-46.6	-20.3	26.3	37
4879.3	-49.8	-20.3	29.5	17
7319.8	-45.8	-20.3	25.5	17
4960.1	-52.6	-20.3	32.3	39
7438.8	-48.3	-20.3	28.0	39
2399.2	-50.6	-20.3	30.3	37
2484.2	-57.5	-20.3	37.2	39

Plots



Company: Eberhard

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Name: Latch PCB

Model: 17240-25

Serial: Engineering Sample

5.1.6 Antenna Port Conducted Emissions – Frequency Stability

Operator	Anthony Smith	QA	Adam Alger
Temperature	21.9, 22.5, 22.9°C	R.H. %	31.8, 34.3, 39.9%
Test Date	4/10/2023, 4/12/2023, 4/13/2023	Location	Chamber 3
Requirement	FCC: 2.1055 (d)	Method	ANSI C63.10 §6.8

Limits: Reported

Test Parameters

Frequency	2402, 2440, 2480 MHz	Setup	Conducted
RBW	1 kHz	VBW	3 kHz

EUT Parameters

Input Power	10.2, 12.0, 13.8VDC	Mode	BLE 1Mbps Tx
Frequency	2402, 2440, 2480 MHz	Channel	37, 17, 39

Data

Table

Channel	12.0VDC (Hz)	10.2VDC (Hz)	13.8VDC (Hz)	Deviation (Hz)	Limit (Hz)	Margin (Hz)
37	2401819661	2401795339	2401829492	34153	120091	85938
17	2439814939	2439814607	2439931155	116548	121991	5443
39	2479802217	2479819172	2479801536	17636	123990	106354

5.2 Radiated Emissions

Description of Measurement	The frequency spectrum is investigated for intentional and / or unintentional signals emanating from the EUT by use of a standardized test site and measurement antenna. The antenna, cable, pre-amp, and other necessary measurement system correction factors are loaded onto the EMI receiver / spectrum analyzer when the measurements are performed allowing the data to be gathered and reported as corrected values. The maximum emissions from the EUT are determined by turn-table azimuth rotation (360°) and scanning of the measurement antenna. Maximized levels are noted at degree values of azimuth, measurement antenna height, and measurement antenna polarity.
Example Calculations	Measurement (dBμV) + Cable factor (dB) + Other (dB) + Antenna Factor (dB/m) = Corrected Reading (dBμV/m) Margin (dB) = Limit (dBμV/m) - Corrected Reading (dBμV/m) Example at 4000 MHz: Reading = 40 dBμV + 3.4 dB + 0.9 dB + 6.5 dB/m = 50.8 dBμV/m Average Limit = 20 log (500) = 54 dBμV/m Margin = 54 dBμV/m - 50.8 dBμV/m = 3.2 dB

Block Diagram



5.2.1 Radiated Emissions

Operator	Anthony Smith	QA	Jon Dilley, Adam Alger, Adam Hauke
Temperature	23.5, 23.1, 22.5, 23.1°C	R.H. %	25.4, 29.1, 34.3, 29.5%
Test Date	3/28/2023, 4/10/2023, 4/12/2023, 12/4/2023	Location	Chamber 3
Requirement	FCC 15.247	Method	ANSI C63.10

Limits:

Frequency (MHz)	Quasi Peak Limit (dBuV/m)	Average Limit (dBuV/m)	Peak Limit (dBuV/m)
30-88	40.0	-	-
88-216	43.5	-	-
216-960	46.0	-	-
960-1000	54.0	-	-
1000-25000	-	54.0	74.0

Test Parameters

Frequency	30 MHz - 25 GHz	Distance	3m
Detector(s)	Peak, Quasi-Peak, Average	Table height	80cm Below 1 GHz 150cm Above 1 GHz
RBW	120 kHz Below 1 GHz 1 MHz Above 1 GHz	VBW	1.2 MHz Below 1 GHz 3 MHz Peak Above 1 GHz 1.8 kHz Avg Above 1 GHz
Example Calculations	Minimum Average VBW = 1/Transmitter On Time 1/0.0006022 = 1660.6 Hz Minimum Average VBW		
Notes	30 kHz VBW used for prescan plots for emission identification purposes only. 1.8 kHz VBW used for measurement, see Data Tables for final tabular data.		

EUT Parameters

Input Power	12VDC Battery	Mode	BLE Transmit
Data Rate	1Mbps	Channels	37, 17, 39
Notes	Power Setting 4 used during some radiated testing. Power Setting 2 used for final compliance purposes.		

Instrumentation

Asset #	Description	Manufacturer	Model #	Serial #	Date	Due Date	Status
AA 960007	Antenna - Double Ridge Horn	EMCO	3115	9311-4138	8/23/2022	8/23/2023	Active Calibration
AA 960081	Antenna - Double Ridge Horn	EMCO	3115	6907	1/11/2023	1/11/2024	Active Calibration
AA 960153	Filter - High Pass 2.4 GHz	KWM	HPF-L-14186	7272-04	4/13/2023	4/13/2024	Active Calibration
AA 960154	Filter - High Pass 2.4 GHz	KWM	HPF-L-14186	7272-02	4/13/2023	4/13/2024	Active Calibration
AA 960163	Antenna - Log Periodic	A.H. Systems, Inc.	SAS-512-2	500	8/25/2022	8/25/2023	Active Calibration
AA 960209	Antenna - Low Noise Amplifier	Mini-Circuits	ZVA-213X-S+	037101808	8/23/2022	8/23/2023	Active Calibration
AA 960218	Antenna - Biconical	A.H. Systems, Inc.	SAS-540	853	6/9/2022	6/9/2023	Active Calibration
AA 960219	Cable	A.H. Systems, Inc.	SAC-26G-6	551	2/16/2023	2/16/2024	Active Verification
AA 960220	Cable	A.H. Systems, Inc.	SAC-26G-6	552	2/16/2023	2/16/2024	Active Verification
EE 960085	Analyzer - EMI Receiver	Agilent	N9038A	MY51210148	4/11/2023	4/11/2024	Active Calibration
EE 960203	Analyzer - EMI Receiver	Keysight	N9038A	MY56400072	4/13/2023	4/13/2024	Active Calibration
LSC-300	Cable	Chamber 3 Emissions	-	-	4/26/2023	4/26/2024	Active Verification
AA 960158	Antenna - Double Ridge Horn	ETS Lindgren	3117	109300	1/30/2023	1/30/2024	Active Calibration

Data

Tables

Average Measurements - Spurious

Channel / Mode	Frequency (MHz)	Antenna Polarity	Height (cm)	Azimuth (degree)	Average Reading (dBμV/m)	Average Limit (dBμV/m)	Average Margin (dB)	EUT Orientation	Power Setting
17/1M	7320.0	V	100	344	52.1	54.0	1.9	Horizontal	4
17/1M	7320.0	H	298	186	46.1	54.0	8.0	Horizontal	4
17/1M	7320.0	H	100	168	52.3	54.0	1.7	Flat	4
17/1M	7319.9	V	100	128	50.1	54.0	3.9	Flat	4
17/1M	7320.0	V	143	186	46.2	54.0	7.8	Vertical	4
17/1M	7320.0	H	132	246	51.0	54.0	3.0	Vertical	4
17/1M	12197.9	V	212	169	40.4	54.0	13.7	Vertical	4
37/1M	4803.6	H	100	131	52.6	54.0	1.4	Flat	2
17/1M	4879.6	H	100	132	52.9	54.0	1.1	Flat	2
39/1M	4959.6	H	100	125	52.9	54.0	1.1	Flat	2

Peak Measurements - Spurious

Channel / Mode	Frequency (MHz)	Antenna Polarity	Height (cm)	Azimuth (degree)	Peak Reading (dBμV/m)	Peak Limit (dBμV/m)	Peak Margin (dB)	EUT Orientation	Power Setting
17/1M	7320.0	V	100	344	57.9	74.0	16.1	Horizontal	4
17/1M	7320.0	H	298	186	52.5	74.0	21.5	Horizontal	4
17/1M	7320.0	H	100	168	58.2	74.0	15.8	Flat	4
17/1M	7319.9	V	100	128	56.1	74.0	17.9	Flat	4
17/1M	7320.0	V	143	186	53.0	74.0	21.1	Vertical	4
17/1M	7320.0	H	132	246	56.4	74.0	17.6	Vertical	4
17/1M	12197.9	V	212	169	49.6	74.0	24.4	Vertical	4
37/1M	4803.6	H	100	131	55.2	74.0	18.8	Flat	2
17/1M	4879.6	H	100	132	55.9	74.0	18.1	Flat	2
39/1M	4959.6	H	100	125	55.7	74.0	18.3	Flat	2

Peak Emissions – Fundamental

Channel / Mode	Frequency (MHz)	Antenna Polarity	Height (cm)	Azimuth (degree)	Peak Reading (dBμV/m)	EUT Orientation	Power Setting
17/1M	2439.7	H	150	213	98.3	Horizontal	2
37/1M	2402.0	H	150	201	97.4	Horizontal	2
39/1M	2480.1	H	130	232	97.6	Horizontal	2

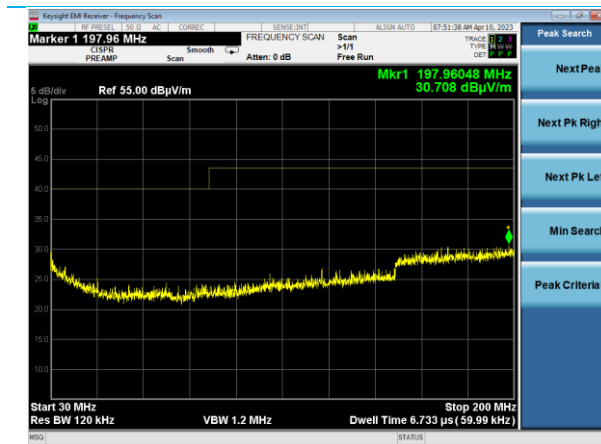
Average Measurements – Band Edge – Power Setting 2

Channel / Mode	Frequency (MHz)	Antenna Polarity	Height (cm)	Azimuth (degree)	Average Reading (dBμV/m)	Average Limit (dBμV/m)	Average Margin (dB)	EUT Orientation
39/1M	2483.6	H	130	232	42.0	54.0	12.0	Horizontal
37/1M	2373.9	H	150	201	40.9	54.0	13.2	Horizontal

Peak Measurements – Band Edge – Power Setting 2

Channel / Mode	Frequency (MHz)	Antenna Polarity	Height (cm)	Azimuth (degree)	Peak Reading (dBμV/m)	Peak Limit (dBμV/m)	Peak Margin (dB)	EUT Orientation
39/1M	2483.8	H	130	232	57.1	74.0	16.9	Horizontal
37/1M	2363.4	H	150	201	53.2	74.0	20.8	Horizontal

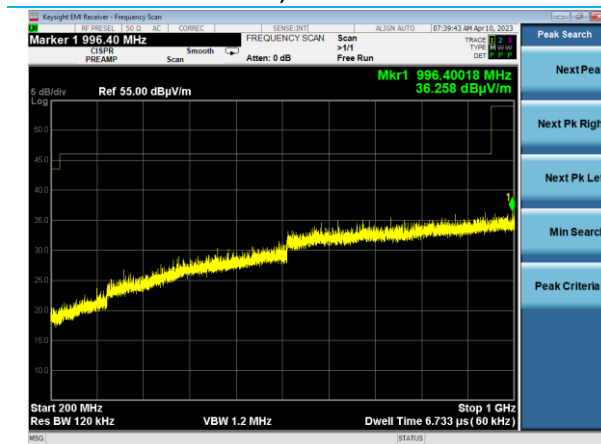
Plots - Prescan



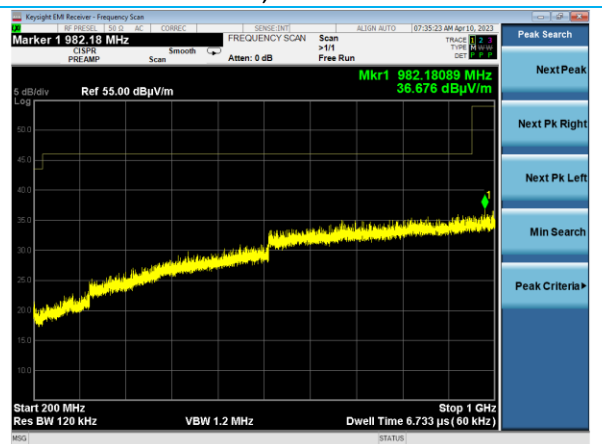
30-200 MHz Horizontal
Tx Mid, EUT Vertical



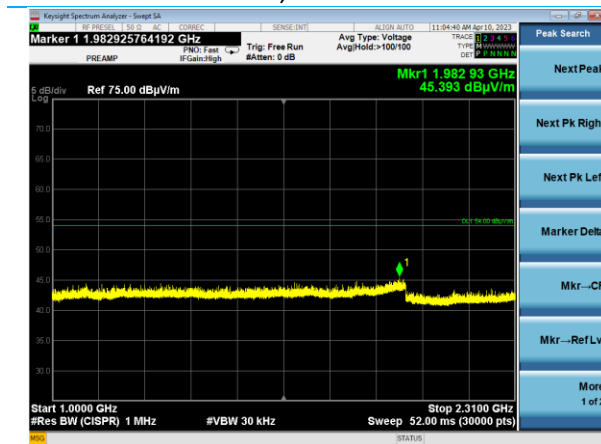
30-200 MHz Vertical
Tx Mid, EUT Vertical



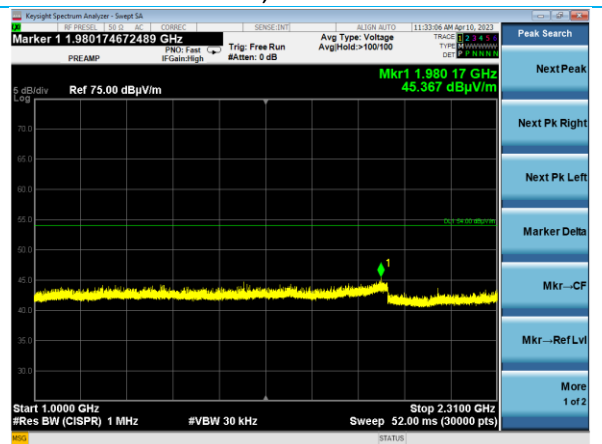
200-1000 MHz Horizontal
Tx Mid, EUT Vertical



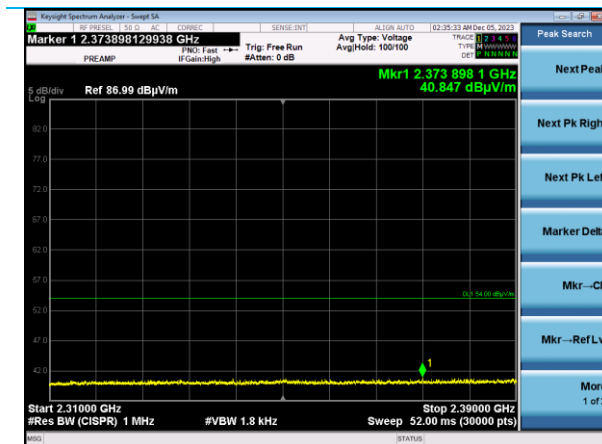
200-1000 MHz Vertical
Tx Mid, EUT Vertical



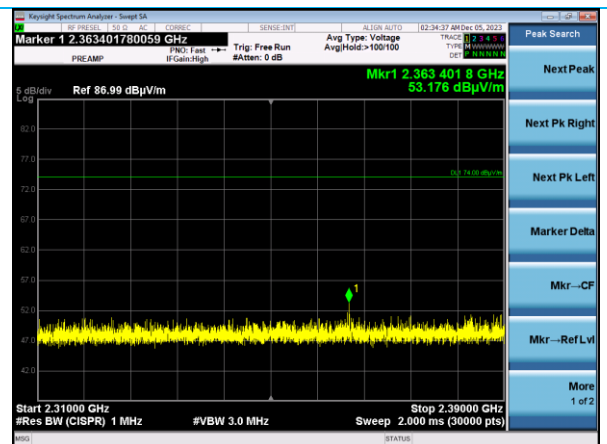
1000-2310 MHz Horizontal
Tx Mid, EUT Vertical



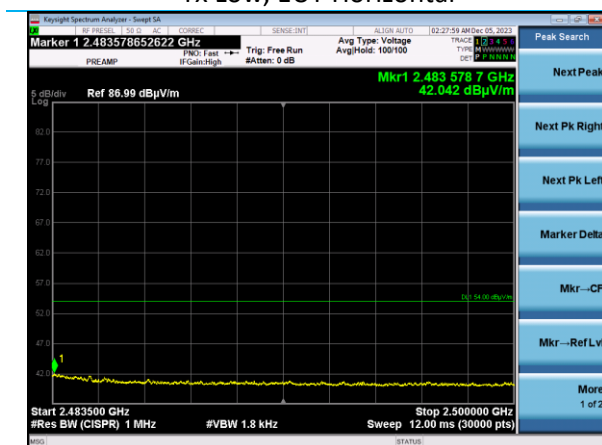
1000-2310 MHz Vertical
Tx Mid, EUT Vertical



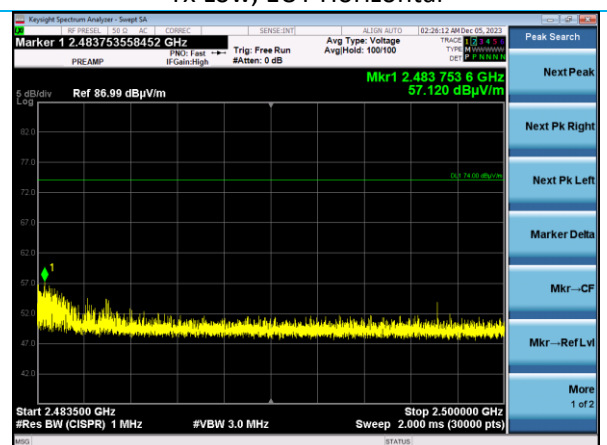
2310-2390 MHz Horizontal Average
Tx Low, EUT Horizontal



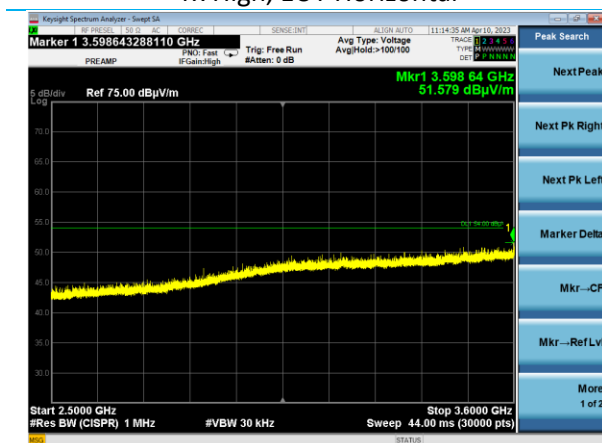
2310-2390 MHz Horizontal Peak
Tx Low, EUT Horizontal



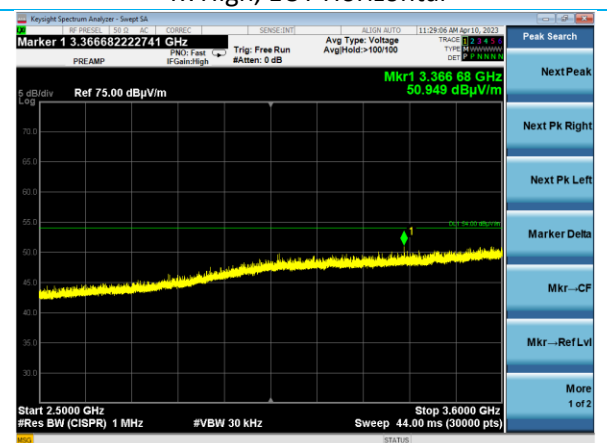
2483.5-2500 MHz Horizontal Average
Tx High, EUT Horizontal



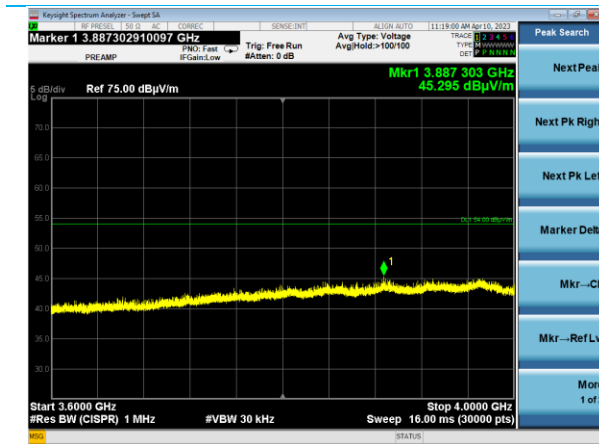
2483.5-2500 MHz Horizontal Peak
Tx High, EUT Horizontal



2500-3600 MHz Horizontal
Tx Mid, EUT Vertical



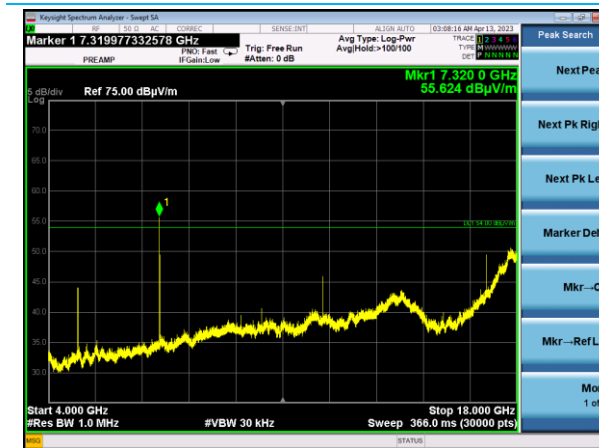
2500-3600 MHz Vertical
Tx Mid, EUT Vertical



3600-4000 MHz Horizontal
Tx Mid, EUT Vertical



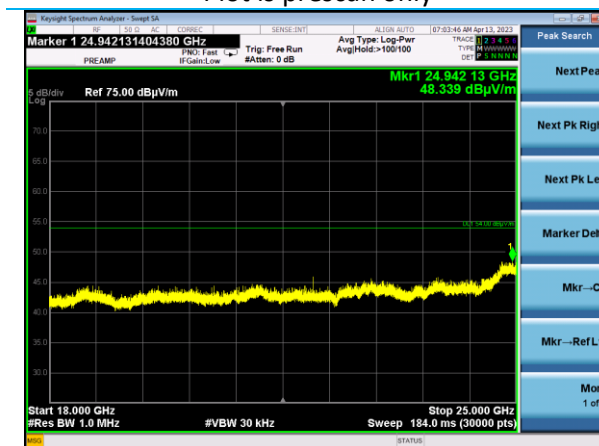
3600-4000 MHz Vertical
Tx Mid, EUT Vertical



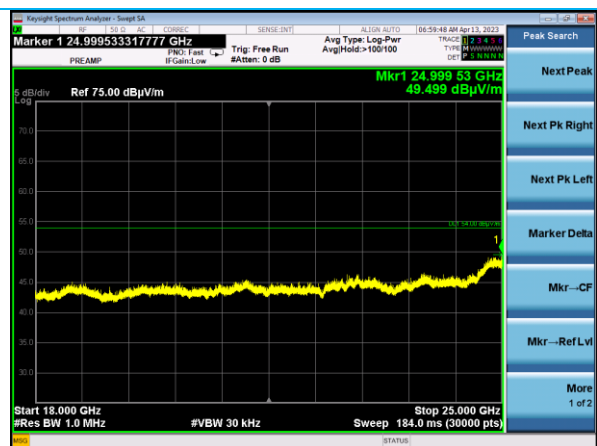
4000-18000 MHz Horizontal
Tx Mid, EUT Vertical



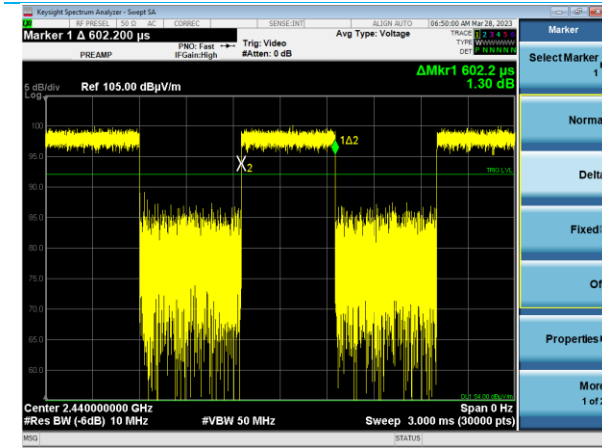
4000-18000 MHz Vertical
Tx Mid, EUT Vertical



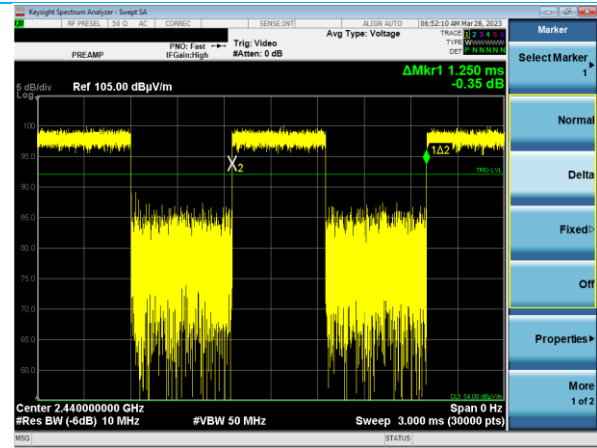
18000-25000 MHz Horizontal
Tx Mid, EUT Vertical



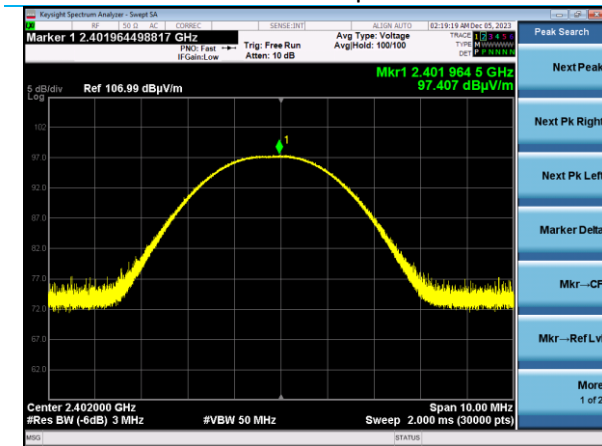
18000-25000 MHz Vertical
Tx Mid, EUT Vertical



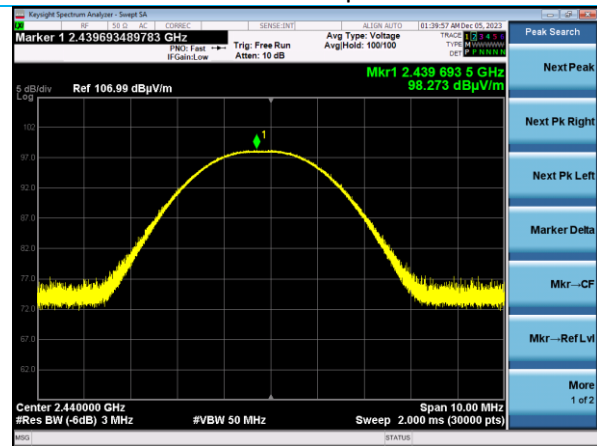
602.2μs On Time
BLE 1Mbps



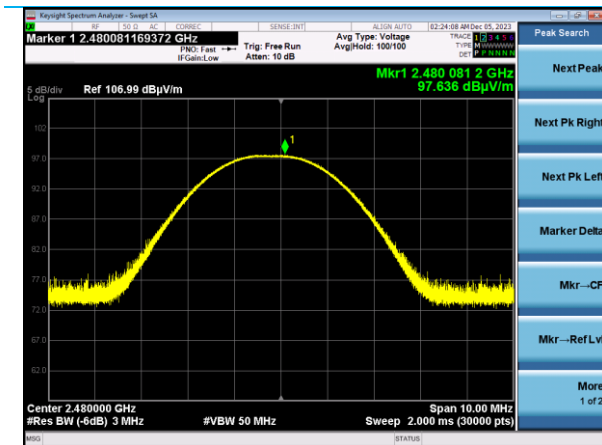
1.250ms Period
BLE 1Mbps



Low Channel 37 Fundamental
EUT Horizontal Antenna Horizontal



Mid Channel 17 Fundamental
EUT Horizontal Antenna Horizontal



High Channel 39 Fundamental
EUT Horizontal Antenna Horizontal

6 REVISION HISTORY

Version	Date	Notes	Person
0	5/10/2023	Initial Draft	Anthony Smith
1	8/2/2023	Revised Draft	Anthony Smith
2	8/17/2023	Revised Draft	Anthony Smith
3	12/5/2023	Revised Draft – Measurements at power 2 added	Anthony Smith
4	1/11/2023	Note added clarifying VBW used for measurements	Anthony Smith
5	1/19/2024	Further clarification on VBW used for measurements	Anthony Smith

END OF REPORT