

Prüfbericht-Nr.: <i>Test report no.:</i>	CN22PK9E 002	Auftrags-Nr.: <i>Order no.:</i>	168392703	Seite 1 von 21 <i>Page 1 of 21</i>
Kunden-Referenz-Nr.: <i>Client reference no.:</i>	N/A	Auftragsdatum: <i>Order date:</i>	2022-09-28	
Auftraggeber: <i>Client:</i>	Degrii, Inc. 8 The Green, Ste A, Dover, DE 19901, United States			
Prüfgegenstand: <i>Test item:</i>	Degrii Smart Thermostat			
Bezeichnung / Typ-Nr.: <i>Identification / Type no.:</i>	THM (Trademark: Degrii)			
Auftrags-Inhalt: <i>Order content:</i>	FCC and IC approval			
Prüfgrundlage: <i>Test specification:</i>	CFR47 FCC Part 15: Subpart C Section 15.247 CFR47 FCC Part 15: Subpart C Section 15.207 CFR47 FCC Part 15: Subpart C Section 15.209 RSS-247 Issue 2 February 2017 RSS-Gen Issue 5 February 2021			
Wareneingangsdatum: <i>Date of sample receipt:</i>	2022-10-10	Please refer to photo documents		
Prüfmuster-Nr.: <i>Test sample no.:</i>	A003345059-001 to 003			
Prüfzeitraum: <i>Testing period:</i>	2022-10-11 – 2022-10-31			
Ort der Prüfung: <i>Place of testing:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüflaboratorium: <i>Testing laboratory:</i>	TÜV Rheinland (Shenzhen) Co., Ltd.			
Prüfergebnis*: <i>Test result*:</i>	Pass			
geprüft von: <i>tested by:</i>	genehmigt von: <i>authorized by:</i>			
Datum: <i>Date:</i> 2022-12-01				
	Signed by: Alex Lan		Signed by: Lin Lin	
Stellung / Position	Assistant Project Manager	Ausstellungsdatum: <i>Issue date:</i> 2022-12-02	Stellung / Position Reviewer	
Sonstiges / Other:				
FCC ID: 2A82N-DEGRIITHM IC: 29487-DEGRIITHM HVIN: THM				
Zustand des Prüfgegenstandes bei Anlieferung: <i>Condition of the test item at delivery:</i>		Prüfmuster vollständig und unbeschädigt <i>Test item complete and undamaged:</i>		
* Legende: 1 = sehr gut 2 = gut 3 = befriedigend P(ass) = entspricht o.g. Prüfgrundlage(n) F(ail) = entspricht nicht o.g. Prüfgrundlage(n)		4 = ausreichend 5 = mangelhaft N/A = nicht anwendbar N/T = nicht getestet		
Legend: 1 = very good 2 = good 3 = satisfactory P(ass) = passed a.m. test specifications(s) F(ail) = failed a.m. test specifications(s)		4 = sufficient 5 = poor N/A = not applicable N/T = not tested		
Dieser Prüfbericht bezieht sich nur auf das o.g. Prüfmuster und darf ohne Genehmigung der Prüfstelle nicht auszugsweise vervielfältigt werden. Dieser Bericht berechtigt nicht zur Verwendung eines Prüfzeichens. <i>This test report only relates to the a. m. test sample. Without permission of the test center this test report is not permitted to be duplicated in extracts. This test report does not entitle to carry any test mark.</i>				

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Test Summary

5.1.1 ANTENNA REQUIREMENT

RESULT: Pass

5.1.2 MAXIMUM CONDUCTED OUTPUT POWER

RESULT: Pass

5.1.3 CONDUCTED POWER SPECTRAL DENSITY

RESULT: Pass

5.1.4 99%dB BANDWIDTH

RESULT: Pass

5.1.5 6dB BANDWIDTH

RESULT: Pass

5.1.6 CONDUCTED SPURIOUS EMISSIONS MEASURED IN 100 KHz BANDWIDTH

RESULT: Pass

5.1.7 RADIATED SPURIOUS EMISSION

RESULT: Pass

5.1.8 CONDUCTED EMISSION ON AC MAINS

RESULT: Pass

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1 General Remarks

1.1 Complementary Materials

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

Appendix A: Photographs of the Test Set-up

Appendix B: Test Results of BLE (ESP32)

Appendix C: Test Results of BLE (WBR1)

2 Test Sites

2.1 Test Facilities

TÜV Rheinland (Shenzhen) Co., Ltd.

No. 362 Huanguan Road Middle, Longhua District, Shenzhen 518110, People's Republic of China

FCC Registration No.: 694916

IC Registration No.: 25069, CAB identifier: CN0078

2.2 List of Test and Measurement Instruments

Table 1: List of Test and Measurement Equipment

Radio Spectrum Testing (TS8997)				
Equipment	Manufacturer	Model	Serial No.	Cal. until
Signal Analyzer	R&S	FSV 40	101441	2023-08-01
OSP	R&S	OSP 150	101017	2023-12-01
Control PC	DELL	OptiPlex 7050	FTJZ9P2	N/A
Test Software	R&S	WMS32 (V11.00.00)	N/A	N/A
Power Meter	R&S	NRP2	107105	2023-12-01
Wideband Power Sensor	R&S	NRP-Z81	105677	2023-08-01
Shielding Room 8#	Albatross	SR8	APC17151-SR8	2024-06-22
Unwanted Emission Testing (TS9975)				
Equipment	Manufacturer	Model	Serial No.	Cal. until
EMI Test Receiver	R&S	ESR 7	102021	2023-08-02
Signal Analyzer	R&S	FSV 40	101439	2023-08-01
System Controller Interface	R&S	SCI-100	S10010038	N/A
Filterbank	R&S	Wlan	100759	2023-08-01
OSP	R&S	OSP 120	102040	N/A
Pre-amplifier	R&S	SCU08F1	08320031	2023-08-02
Amplifier	R&S	SCU-18F	180070	2023-08-02
Amplifier	R&S	SCU40A	100475	2023-08-02
Trilog Broadband Antenna (30 MHz - 7 GHz)	Schwarzbeck	VULB 9162	193	2024-08-06
Double-Ridged Antenna (1 -18 GHz)	ETS-LINDGREN	3117	00218717	2024-08-06
Wideband Ridged Horn Antenna (18-40 GHz)	Steatite	QMS-00880	19067	2024-08-27
Active Loop Antenna	Schwarzbeck	FMZB 1513	302	2023-08-06
Test software	R&S	EMC32 (V10.60.10)	N/A	N/A
Control PC	Dell	OptiPlex 7050	36NV9P2	N/A
3m Semi-Anechoic Chamber	Albatross	SAC-3m	APC17151-SAC	2024-06-22

Conducted Emissions				
Equipment	Manufacturer	Model No.	Serial No.	Cal. Until
EMI Test Receiver	R&S	ESR3	102680	2023-02-27
Artificial Mains Network	R&S	ENV216	101445	2023-02-27
EMC32 test software	R&S	EMC32(Ver.10.50.00)	N/A	N/A

2.3 Traceability

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

2.4 Calibration

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

2.5 Measurement Uncertainty

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

Parameter	Uncertainty (k=2)
RF output power, conducted	± 0.99 dB
Occupied Channel Bandwidth	± 2.08 %
RF power density, conducted	± 0.99 dB
Unwanted Emissions, conducted	± 0.89 dB
Radiated Emission of Transmitter, valid up to 26.5 GHz	±4.17 dB
Radiated Emission of Receiver, valid up to 26.5 GHz	±4.17 dB
Conducted Emission, (9kHz to 150kHz)/(150kHz to 30MHz)	± 3.70 dB / ± 3.30 dB

2.6 Location of Original Data

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

2.7 Status of Facility Used for Testing

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

3 General Product Information

3.1 Product Function and Intended Use

The EUT is Smart Thermostat which supported IEEE 802.11 b/g/n 2.4GHz Wi-Fi and Bluetooth Low Energy.

This product built-in two wireless module:

Module	Technology	Antenna type	Antenna gain
ESP32	BLE	PCB layout antenna	3.97dBi
WBR1	BLE	FPC antenna	4.88dBi
	2.4GHz Wi-Fi	FPC antenna	4.88dBi

The wifi and BLE supported Simultaneous transmission.

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

3.2 Ratings and System Details

Table 2: Technical Specification of EUT

General Information of EUT	Value
Kind of Equipment	Degrii Smart Thermostat
Type Designation	THM
FCC ID	2A82N-DEGRIITHM
IC	29487-DEGRIITHM
HVIN	THM
Operating Voltage	AC 24V, 60Hz

Technical Specification of Wi-Fi 802.11 b/g/n (WBR1)	
Operating Frequency	2412 - 2462 MHz for 802.11b/g/n(HT20)
Type of Modulation	DSSS(DBPSK/DQPSK/CCK) OFDM(BPSK/QPSK/16QAM/64QAM)
Data Rate	1/2/5.5/11 Mbps for 802.11b 6/9/12/18/24/36/48/54 Mbps for 802.11g MCS0 ~ MCS7 for 802.11n
Channel Number	11 channels for 802.11b/g/n(HT20)
Channel Separation	5 MHz
Number of Antenna:	1
Antenna type	FPC antenna
Antenna Gain:	4.88dBi

Technical Specification of Bluetooth Low Energy (WBR1)	
Operating Frequency	2402 – 2480 MHz
Data rate	1Mbps
Channel Number	40 channels
Channel separation	2MHz
Modulation	GFSK
Number of Antenna	1
Antenna Type	FPC antenna
Antenna Gain	4.88dBi

Technical Specification of Bluetooth Low Energy (ESP32)	
Operating Frequency	2402 – 2480 MHz
Data rate	1Mbps
Channel Number	40 channels
Channel separation	2MHz
Modulation	GFSK
Number of Antenna	1
Antenna Type	PCB Layout antenna
Antenna Gain	3.97dBi

Table 3: RF Channel and Frequency of Wi-Fi 802.11 b/g/n

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
01	2412	05	2432	09	2452
02	2417	06	2437	10	2457
03	2422	07	2442	11	2462
04	2427	08	2447	/	/

Table 4: RF Channel and Frequency of Bluetooth Low Energy

RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)	RF Channel	Frequency (MHz)
00	2402.00	10	2422.00	20	2442.00	30	2462.00
01	2404.00	11	2424.00	21	2444.00	31	2464.00
02	2406.00	12	2426.00	22	2446.00	32	2466.00
03	2408.00	13	2428.00	23	2448.00	33	2468.00
04	2410.00	14	2430.00	24	2450.00	34	2470.00
05	2412.00	15	2432.00	25	2452.00	35	2472.00
06	2414.00	16	2434.00	26	2454.00	36	2474.00
07	2416.00	17	2436.00	27	2456.00	37	2476.00
08	2418.00	18	2438.00	28	2458.00	38	2478.00
09	2420.00	19	2440.00	29	2460.00	39	2480.00

3.3 Independent Operation Modes

The basic operation modes are:

- A. On, Bluetooth transmitting mode
 - 1. Low channel
 - 2. Middle channel
 - 3. High channel
- B. On(Bluetooth and Wi-Fi connected)
- C. Off

3.4 Noise Generating and Noise Suppressing Parts

Refer to Circuit Diagram for further details.

3.5 Submitted Documents

- | | |
|----------------------------------|-------------------------|
| - Application Form | - Operation Description |
| - Block Diagram | - Schematics |
| - FCC/IC Label and Location Info | - User Manual |

4 Test Set-up and Operation Modes

4.1 Principle of Configuration Selection

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

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

4.2 Test Operation and Test Software

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

4.3 Special Accessories and Auxiliary Equipment

Table 5: List of Accessories and Auxiliary Equipment

Description	Manufacturer	Model	S/N	Rating
Laptop	Lenovo	T480	N/A	N/A
AC Adapter	N/A	K24-300	N/A	Input: 120VAC/60Hz, 18W Output: 24VAC 300mA

4.4 Countermeasures to Achieve EMC Compliance

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

No additional measures were employed to achieve compliance.

4.5 Test Setup Diagram

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

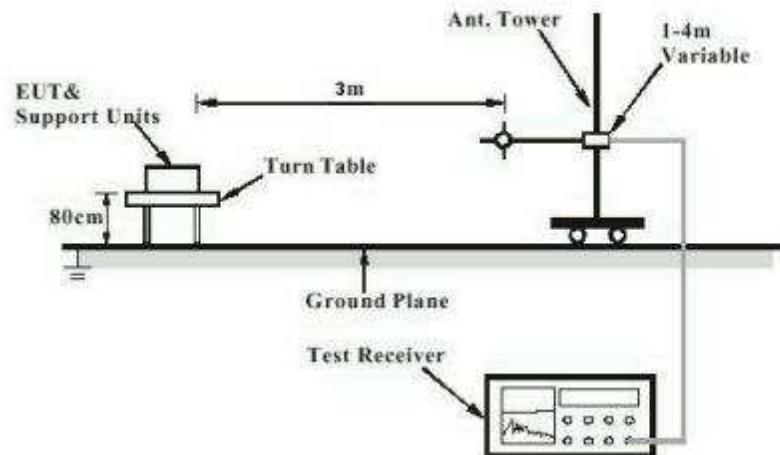


Diagram of Measurement Configuration for Radiation Test (Above 1GHz)

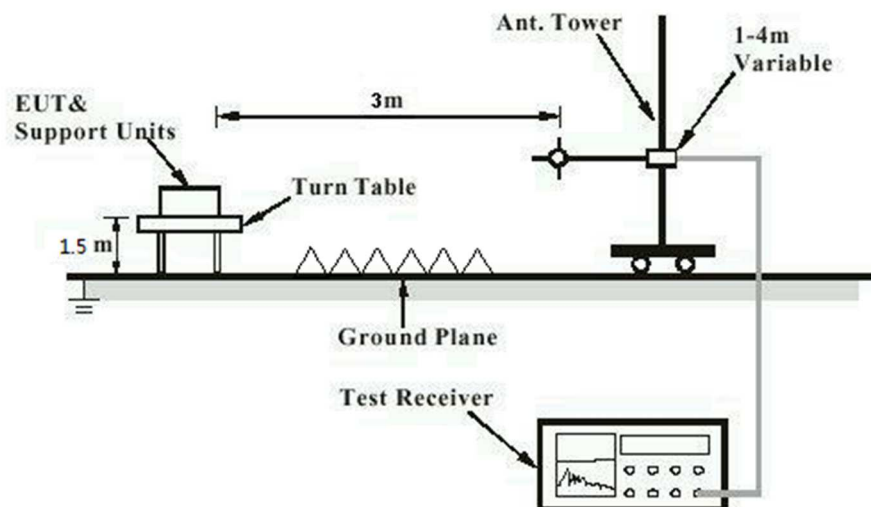


Diagram of Measurement Configuration for Mains Conduction Measurement

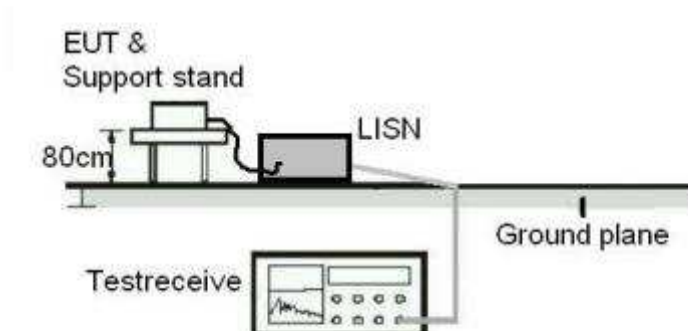
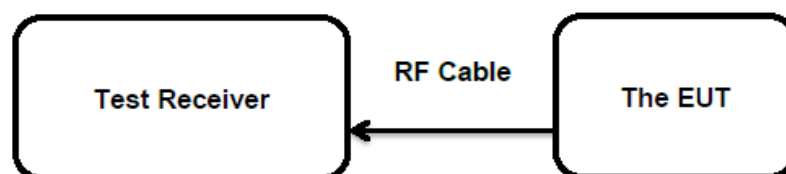


Diagram of Measurement Configuration for Conducted Transmitter Measurement



5 Test Results

5.1 Transmitter Requirement & Test Suites

5.1.1 Antenna Requirement

RESULT:

Pass

Test Specification

Test standard

: FCC Part 15.247(b)(4) and Part 15.203
: RSS-Gen Clause 6.7

Limit

: the use of antennas with directional gains that do not
: exceed 6 dBi

According to the manufacturer declared, the EUT has two antenna, the maximum directional gain of antenna are 4.88 dBi and 3.97dBi, and the antenna connector is designed with permanent attachment and no consideration of replacement. Therefore the EUT is considered sufficient to comply with the provision.

Refer to EUT Photo for further details.

5.1.2 Maximum Conducted Output Power

RESULT:
Pass
Test Specification

Test standard	:	FCC Part 15.247(b)(3)
	:	RSS-247 Clause 5.4(d)
Basic standard	:	ANSI C63.10: 2013
Limits	:	< 1 Watt (Maximum Conducted Peak Power)
	:	e.i.r.p. <4W
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-10-20
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.8 °C
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

For details refer to following test result.

Table 6: Test Result of Maximum Conducted Output Power, 1Mbps

Module	Channel	Channel Frequency (MHz)	Conducted Peak Output Power		Limit
			(dBm)	(W)	(W)
ESP32	Low Channel	2402	17.7	0.0589	1
	Middle Channel	2440	18.7	0.0741	1
	High Channel	2480	12.2	0.0166	1
WBR1	Low Channel	2402	4.7	0.0030	1
	Middle Channel	2440	5.3	0.0034	1
	High Channel	2480	5.4	0.0035	1

Note: The cable loss is taken into account in results and the e.i.r.p. is 22.67 dBm less than 4W (36 dBm).

5.1.3 Conducted Power Spectral Density

RESULT:
Pass
Test Specification

Test standard	:	FCC Part 15.247(e)
	:	RSS-247 Clause 5.2(b)
Basic standard	:	ANSI C63.10: 2013
Limits	:	8 dBm / 3kHz
Kind of test site	:	Shielded Room

Test Setup

Date of testing	:	2022-10-20
Input voltage	:	AC 120V, 60Hz
Operation mode	:	A
Test channel	:	Low / Middle / High
Ambient temperature	:	24.8 °C
Relative humidity	:	55 %
Atmospheric pressure	:	101 kPa

Table 7: Test Result of Power Spectral Density, 1Mbps

Module	Channel	Channel Frequency (MHz)	Power Spectral Density (dBm/3kHz)	Limit (dBm/3kHz)
ESP32	Low Channel	2402	1.13	8
	Middle Channel	2440	1.53	8
	High Channel	2480	-4.02	8
WBR1	Low Channel	2402	-11.40	8
	Middle Channel	2440	-10.56	8
	High Channel	2480	-10.63	8

Note: The cable loss is taken into account in results.

For the measurement records, refer to the appendix B&C.

5.1.4 99%dB Bandwidth

RESULT:

Pass

Test Specification

Test standard : RSS-Gen clause 6.7
Basic standard : ANSI C63.10: 2013
Kind of test site : Shielded Room

Test Setup

Date of testing : 2022-10-11 to 2022-10-20
Input voltage : AC 120V, 60Hz
Operation mode : A
Test channel : Low / Middle / High
Ambient temperature : 24.8 °C
Relative humidity : 55 %
Atmospheric pressure : 101 kPa

Table 8: Test Result of 99% Bandwidth, 1Mbps

Module	Channel	Channel Frequency (MHz)	99% Bandwidth (MHz)	Limit (MHz)	Result
ESP32	Low Channel	2402	1.025	/	Pass
	Mid Channel	2440	1.030	/	Pass
	High Channel	2480	1.025	/	Pass
WBR1	Low Channel	2402	1.020	/	Pass
	Mid Channel	2440	1.030	/	Pass
	High Channel	2480	1.030	/	Pass

For the measurement records, refer to the appendix B & C.

5.1.5 6dB Bandwidth

RESULT:
Pass
Test Specification

Test standard : FCC Part 15.247(a)(2)
 : RSS-247 Clause 5.2(a)
 Basic standard : ANSI C63.10: 2013
 Kind of test site : Shielded Room

Test Setup

Date of testing : 2022-10-11 to 2022-10-20
 Input voltage : AC 120V, 60Hz
 Operation mode : A
 Test channel : Low / Middle / High
 Ambient temperature : 24.8 °C
 Relative humidity : 55 %
 Atmospheric pressure : 101 kPa

Table 9: Test Result of 6dB Bandwidth, 1Mbps

Module	Channel	Channel Frequency (MHz)	-6dB Bandwidth (kHz)	Limit (kHz)	Result
ESP32	Low Channel	2402	653.466	500	Pass
	Mid Channel	2440	653.466	500	Pass
	High Channel	2480	653.466	500	Pass
WBR1	Low Channel	2402	693.070	500	Pass
	Mid Channel	2440	693.070	500	Pass
	High Channel	2480	693.070	500	Pass

For the measurement records, refer to the appendix B & C.

5.1.6 Conducted Spurious Emissions Measured in 100 kHz Bandwidth

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.247(d) RSS-247 Clause 5.5
Basic standard	: ANSI C63.10: 2013
Limits	: 20dB (below that in the 100kHz bandwidth within the band that contains the highest level of the desired power); In addition, radiated emissions which fall in the restricted bands, must also comply with the radiated emission limits specified in 15.209(a)
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2022-10-20 to 2022-10-24
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 24.8 °C
Relative humidity	: 55 %
Atmospheric pressure	: 101 kPa

Test results of 100kHz Bandwidth of Frequency Band Edge by Conducted method refer to test plots, and compliance is achieved as well.

For the measurement records, refer to the appendix B & C.

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5.1.7 Radiated Spurious Emission

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.247(d) & FCC Part 15.205 RSS-247 Clause 3.3 & 5.5
Basic standard	: ANSI C63.10: 2013
Limits	: Refer to 15.209(a) of FCC part 15.247(d) RSS-Gen Table 4 & Table 5
Kind of test site	: 3m Semi-anechoic Chamber

Test Setup

Date of testing	: 2022-10-20 to 2022-10-22
Input voltage	: AC 120V, 60Hz
Operation mode	: A
Test channel	: Low / Middle / High
Ambient temperature	: 23 °C
Relative humidity	: 56 %
Atmospheric pressure	: 101 kPa

Remark:

Testing was carried out within frequency range 9kHz to the tenth harmonics. Only the worst case spurious emissions configuration of the each mode were reported.

For the measurement records, refer to the appendix B & C.

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5.1.8 Conducted Emission on AC Mains

RESULT:**Pass****Test Specification**

Test standard	: FCC Part 15.207(a) RSS-Gen Clause 8.8
Basic standard	: ANSI C63.10: 2013
Frequency range	: 0.15 – 30MHz
Limits	: FCC Part 15.207(a) RSS-Gen Table 4
Kind of test site	: Shielded Room

Test Setup

Date of testing	: 2022-10-31
Input voltage	: AC 120V, 60Hz
Operation mode	: B
Earthing	: Not connected
Ambient temperature	: 24.6 °C
Relative humidity	: 49.5 %
Atmospheric pressure	: 101 kPa

For the measurement records, refer to the appendix B.

6 Photographs of the Test Set-Up

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

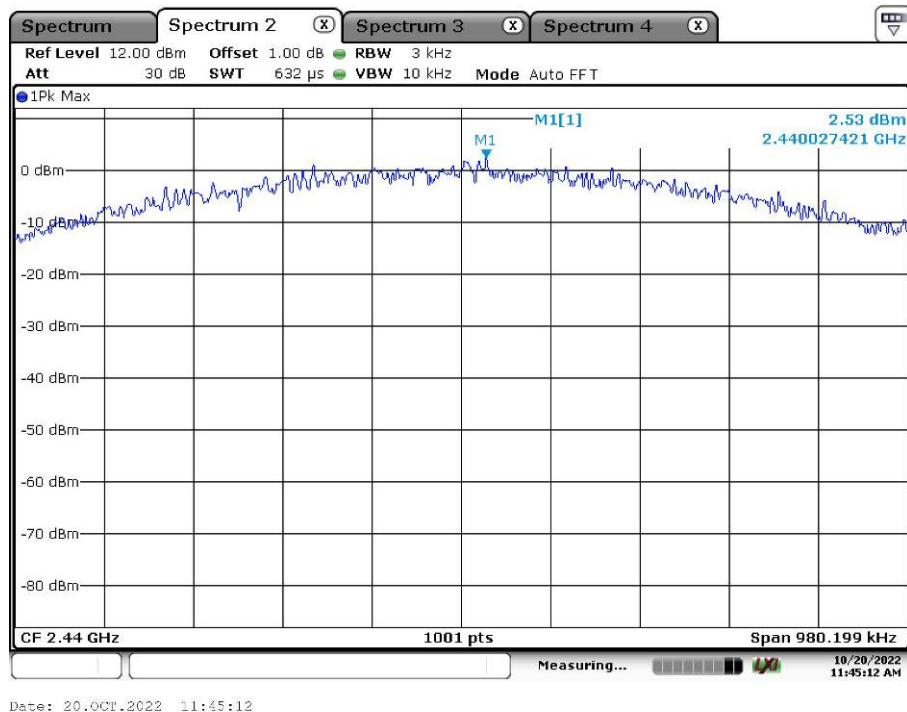
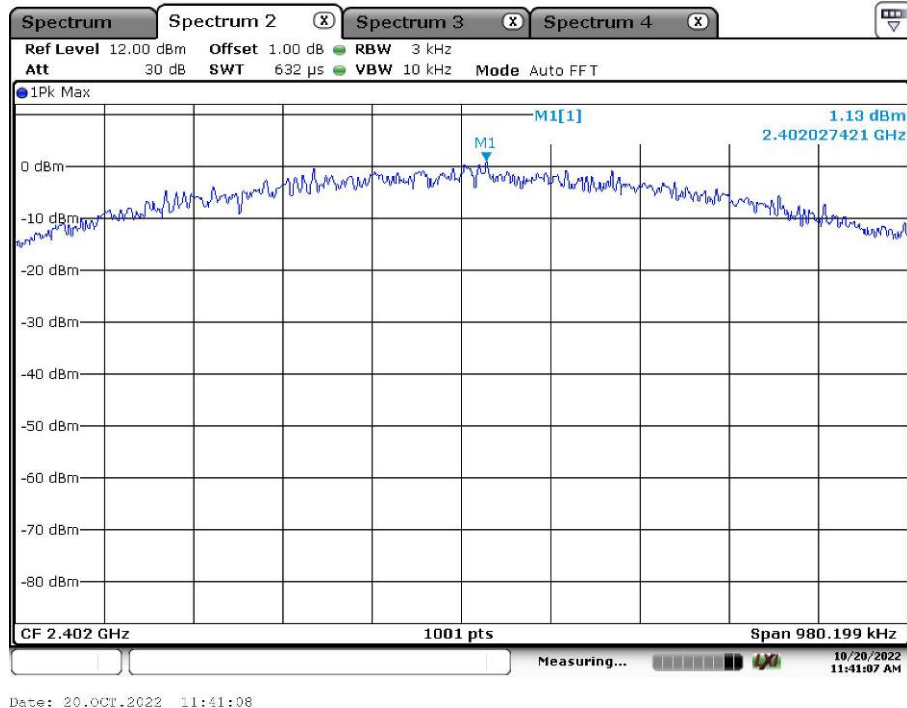
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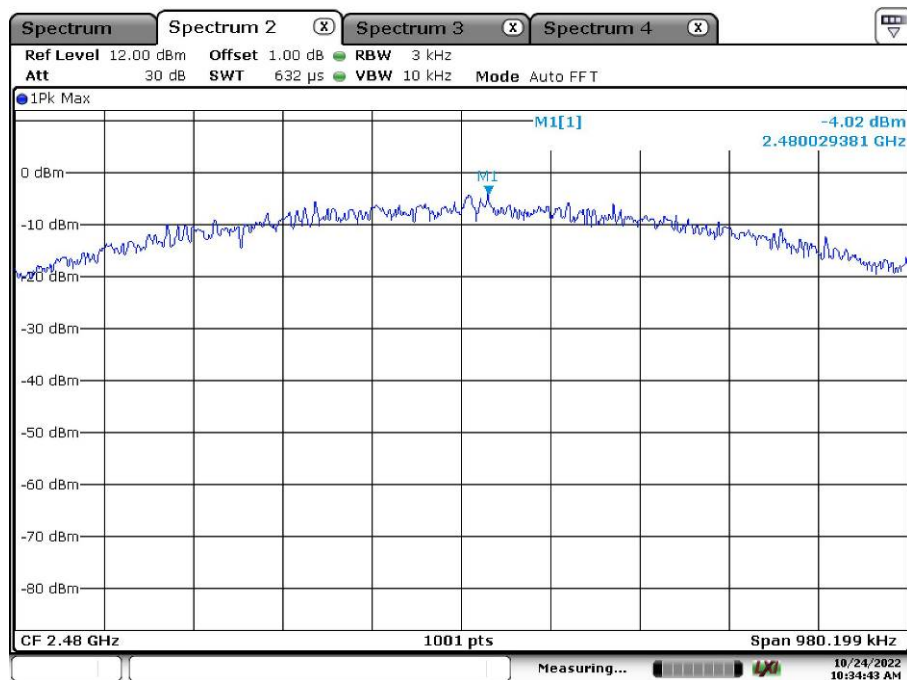
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Appendix B: Test Results of BLE (ESP32)

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Appendix B.1: Test Results of Conducted Power Spectral Density





Date: 24.OCT.2022 10:34:44

Appendix B.2: Test Results of 6dB Bandwidth

Minimum Emission Bandwidth 6 dB (2402 MHz; 10.000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

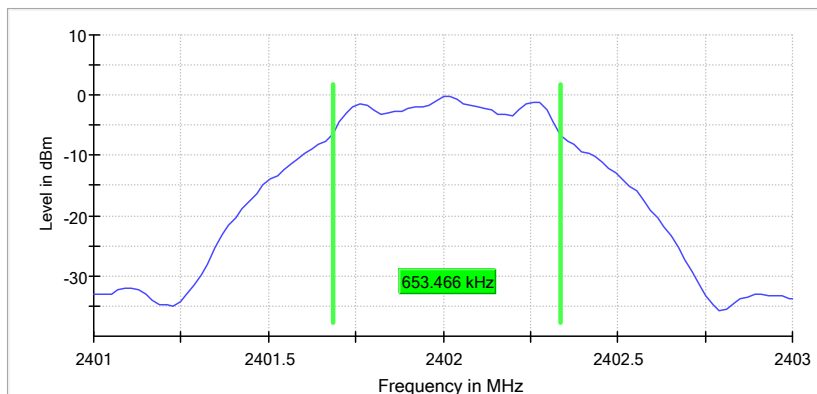
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	0.653466	0.500000	---	2401.683168	2402.336634

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2402.000000	-0.3	PASS

6 dB Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweptime	18.938 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	10 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.36 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2440 MHz; 10.000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

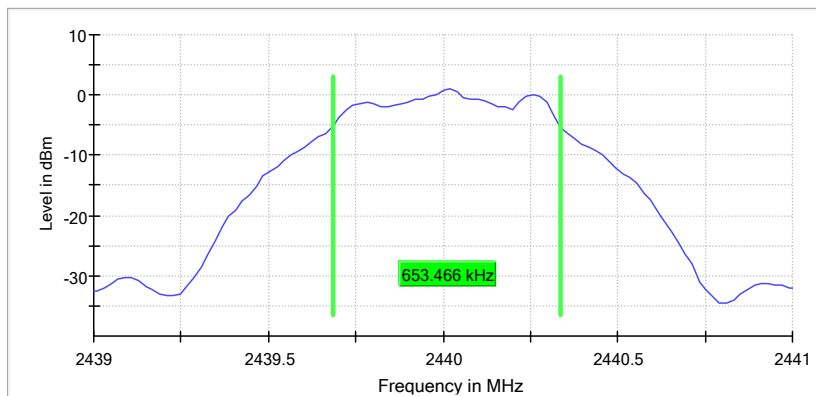
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2440.000000	0.653466	0.500000	---	2439.683168	2440.336634

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2440.000000	0.9	PASS

6 dB Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43900 GHz	2.43900 GHz
Stop Frequency	2.44100 GHz	2.44100 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	18.938 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.25 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2480 MHz; 10.000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

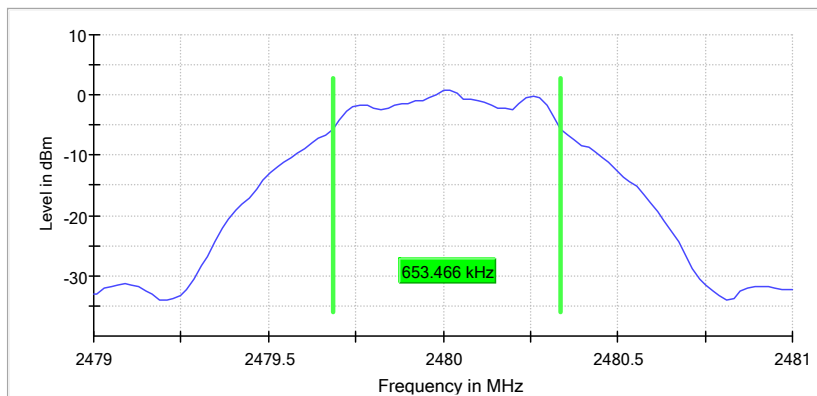
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	0.653466	0.500000	---	2479.683168	2480.336634

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2480.000000	0.8	PASS

6 dB Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
Sweeptime	18.938 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.22 dB	0.50 dB

Appendix B.3: Test Results of 99% Bandwidth

Occupied Channel Bandwidth 99% (2402 MHz; 10.000 dBm; 1 MHz)

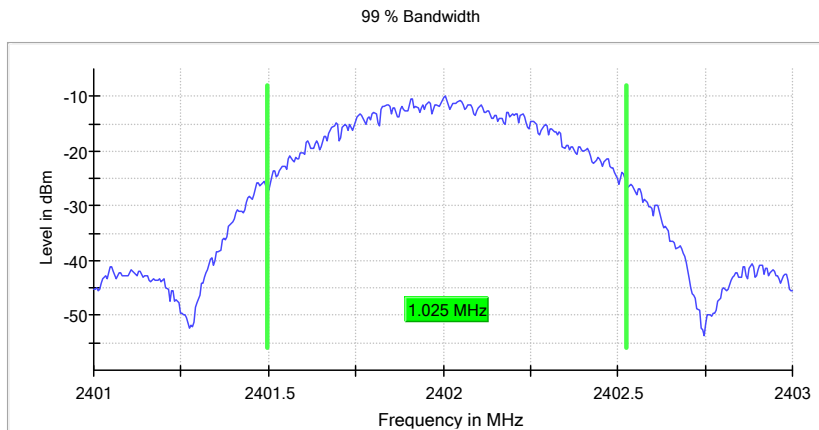
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.025000	---	---	2401.497500	2402.522500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweptime	189.648 µs	AUTO
Reference Level	-10.000 dBm	-10.000 dBm
Attenuation	10.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.09 dB	0.30 dB

Occupied Channel Bandwidth 99% (2440 MHz; 10.000 dBm; 1 MHz)

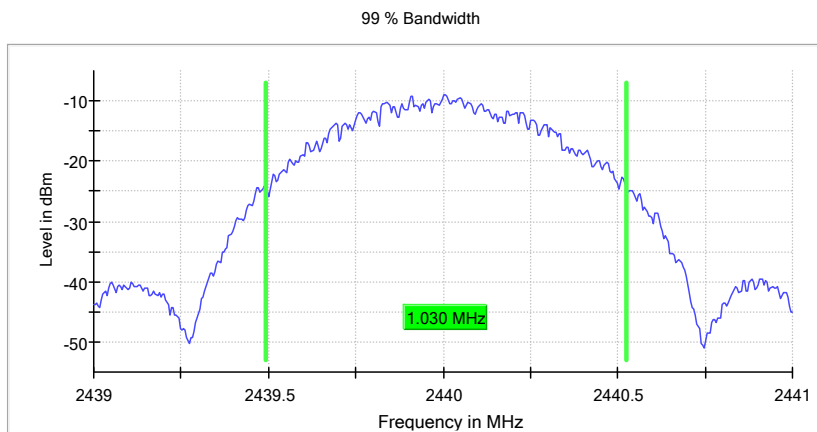
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2440.000000	1.030000	---	---	2439.492500	2440.522500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2440.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43900 GHz	2.43900 GHz
Stop Frequency	2.44100 GHz	2.44100 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweptime	189.648 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	10 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.05 dB	0.30 dB

Occupied Channel Bandwidth 99% (2480 MHz; 10.000 dBm; 1 MHz)

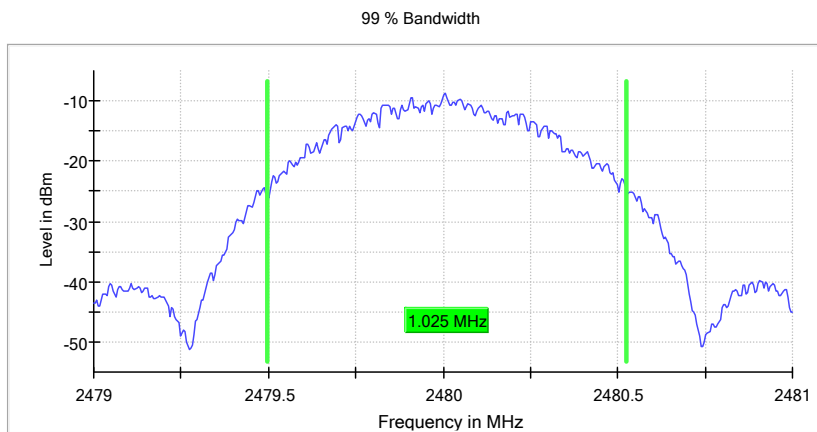
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	1.025000	---	---	2479.497500	2480.522500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS

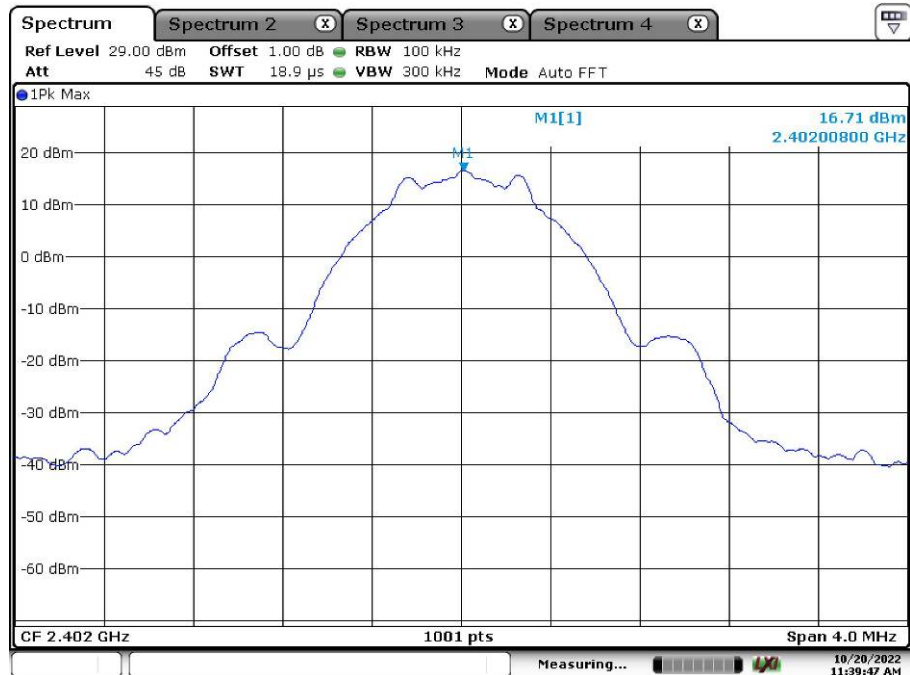


Measurement

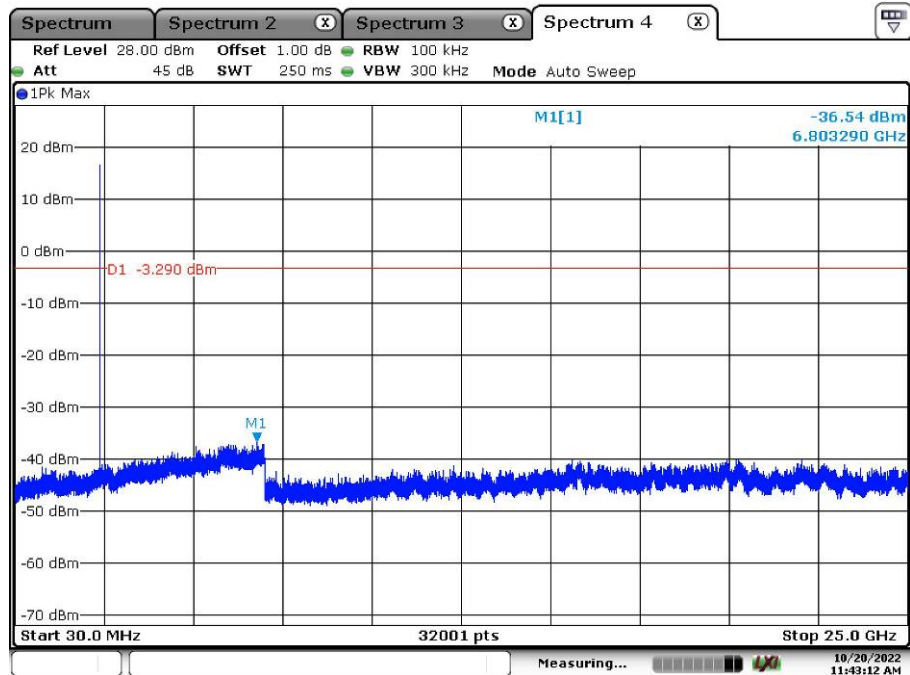
Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweeptime	189.648 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
Sweeptype	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	7 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.03 dB	0.30 dB

Appendix B.4: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

Low Channel:

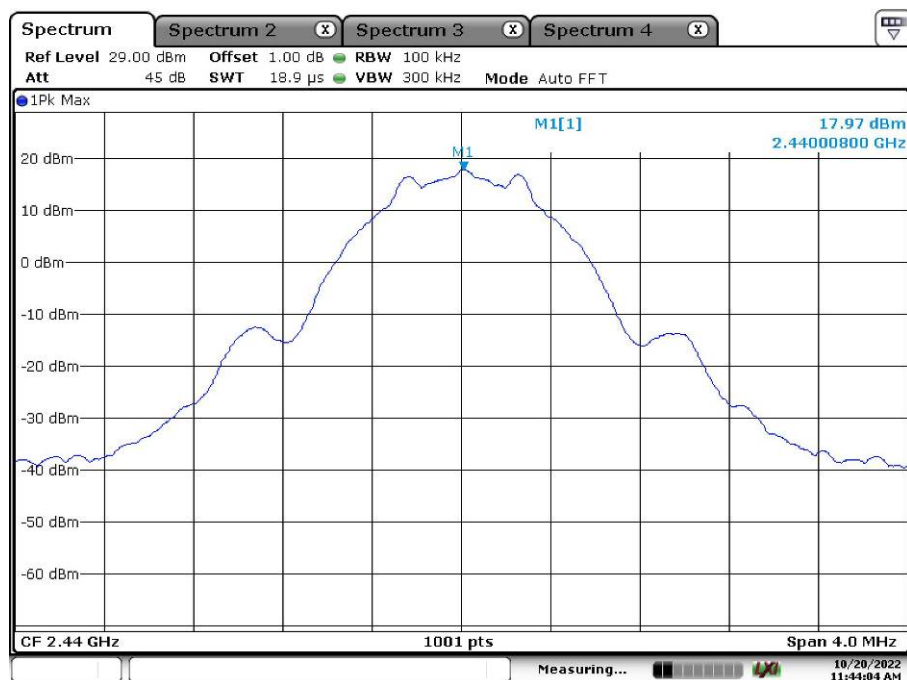


Date: 20.OCT.2022 11:39:47

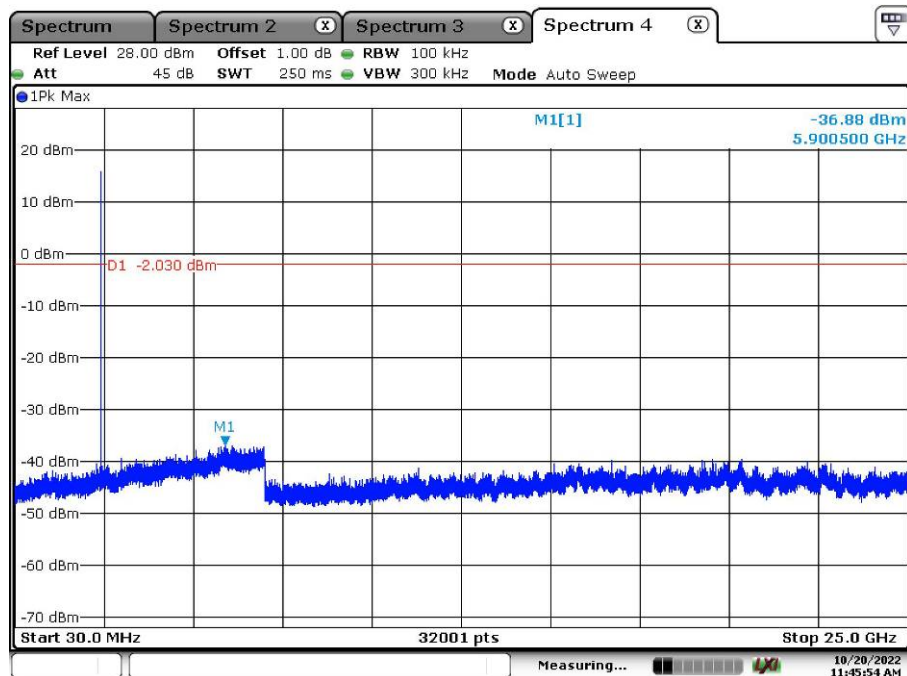


Date: 20.OCT.2022 11:43:12

Middle Channel:

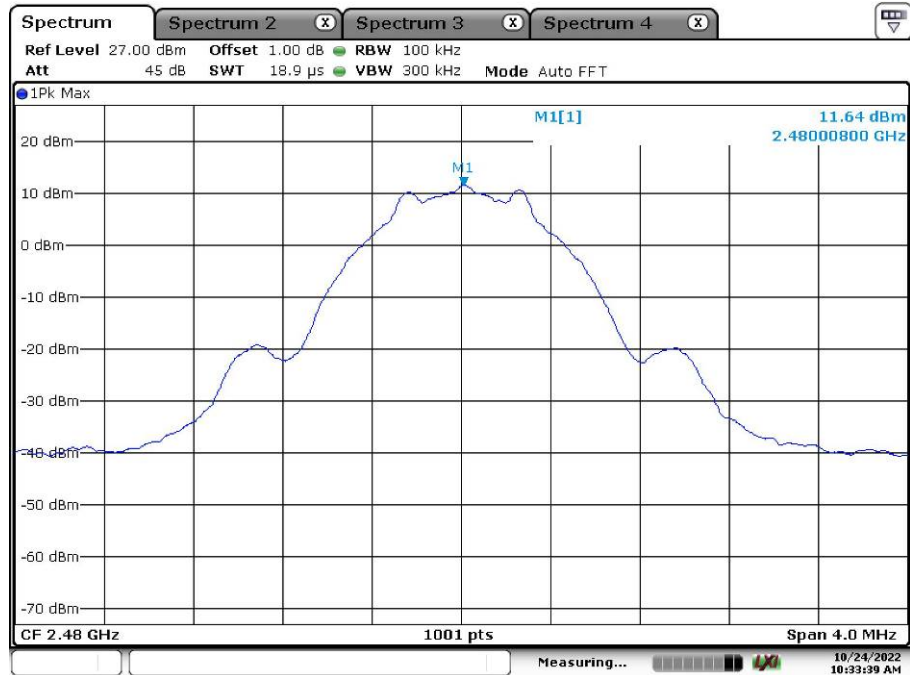


Date: 20.OCT.2022 11:44:04

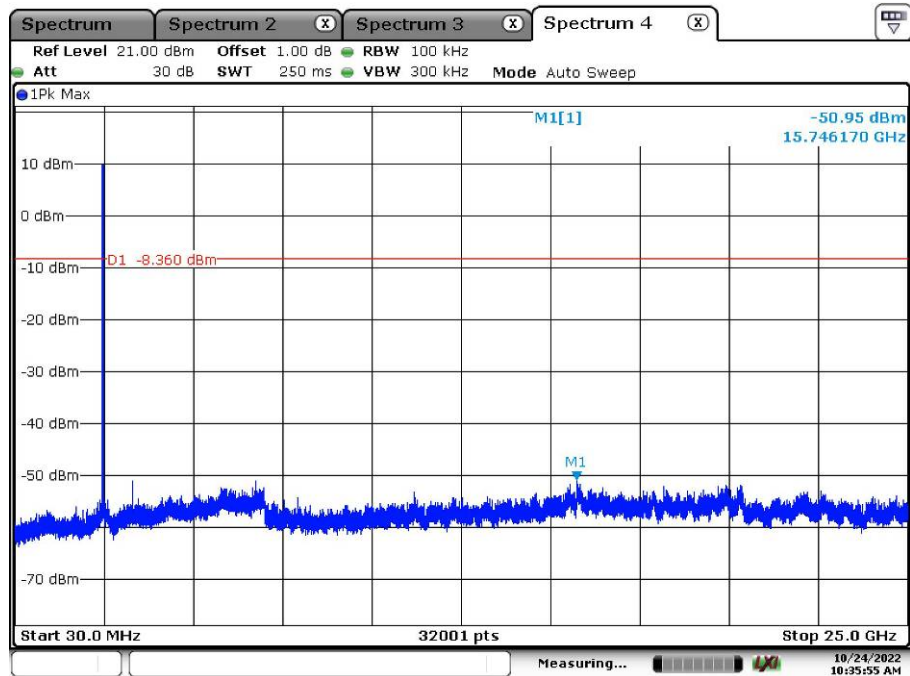


Date: 20.OCT.2022 11:45:55

High Channel:

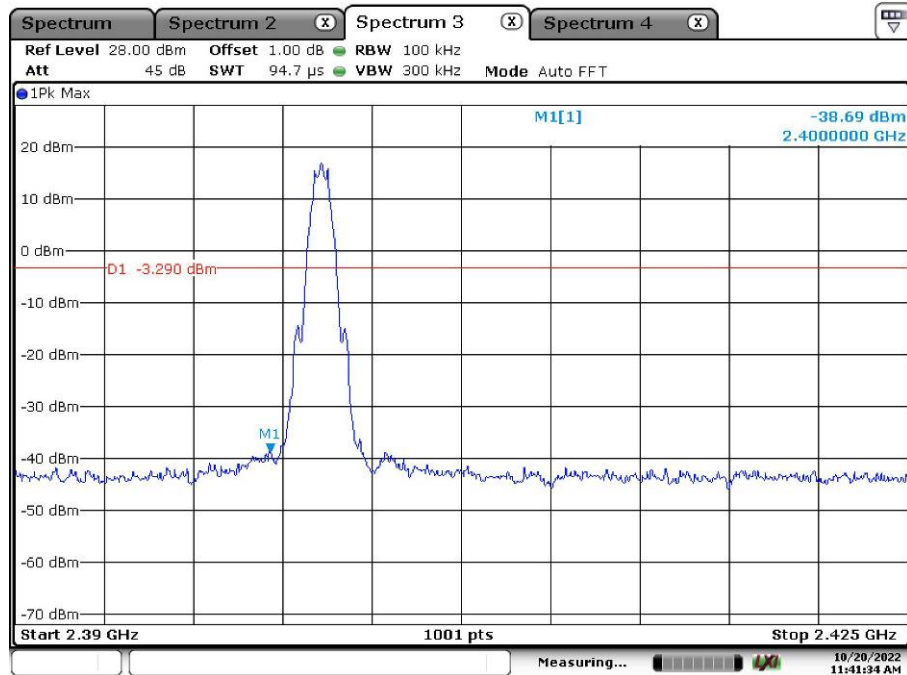


Date: 24.OCT.2022 10:33:39



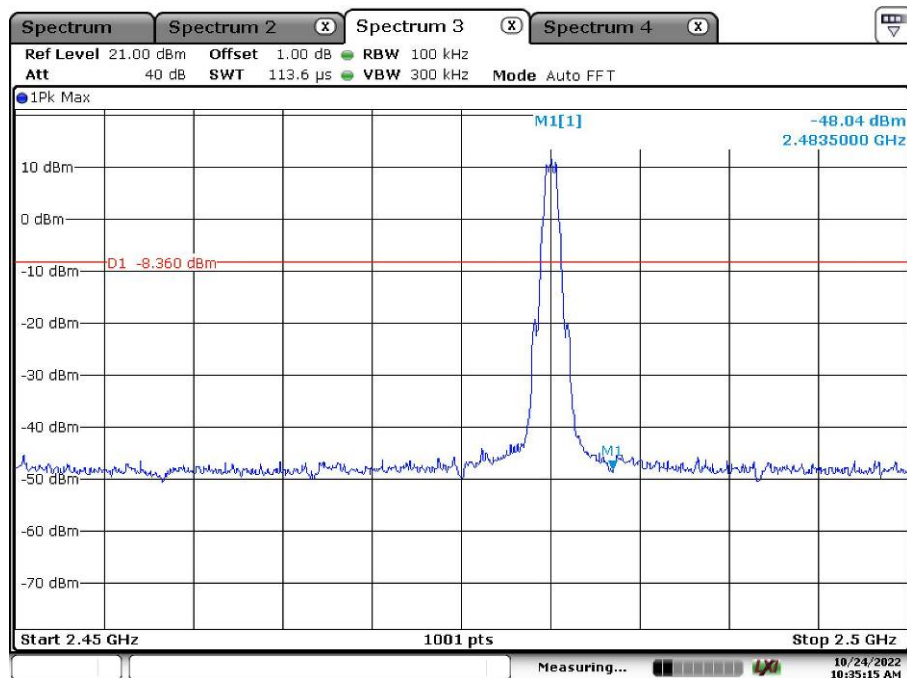
Date: 24.OCT.2022 10:35:56

Band Edge, Low Channel:



Date: 20.OCT.2022 11:41:35

Band Edge, High Channel:



Date: 24.OCT.2022 10:35:15

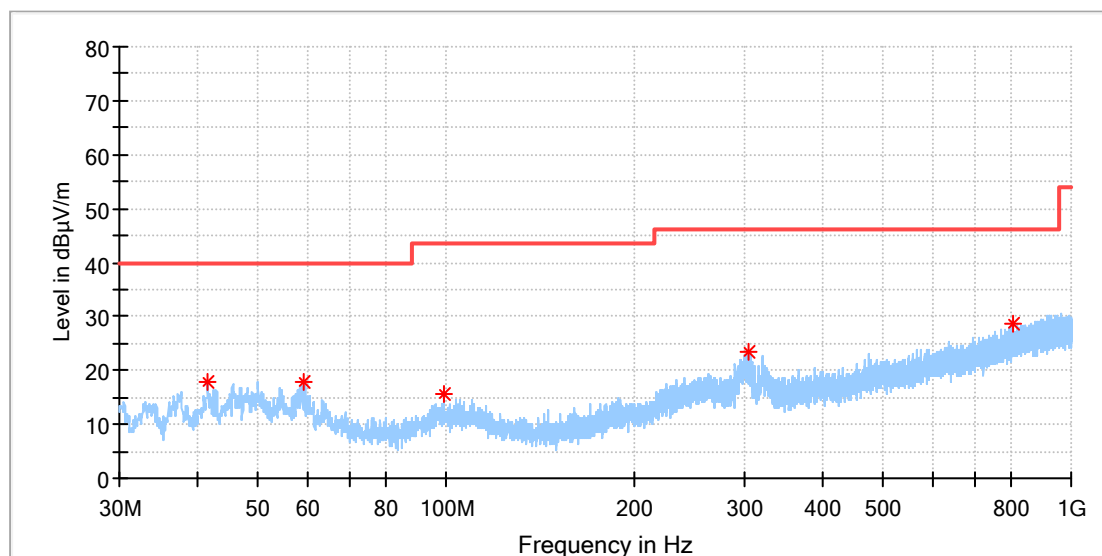
Appendix B.5: Test Results of Radiated Spurious Emissions

Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and above 18GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

30 MHz - 1GHz

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

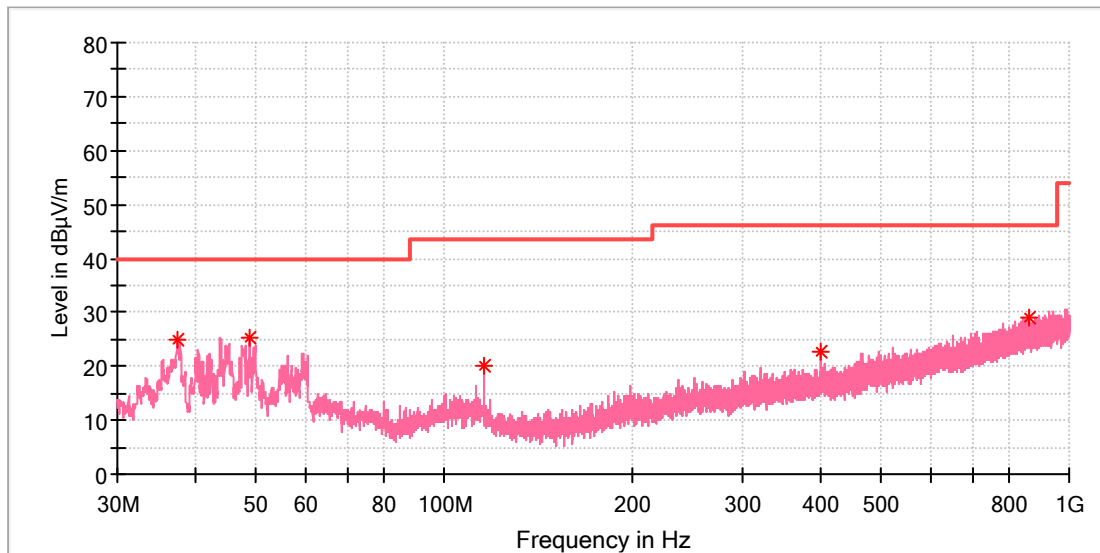


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
41.591500	17.88	40.00	22.12	100.0	H	133.0	-19.7
59.342500	17.99	40.00	22.01	100.0	H	0.0	-18.9
99.209500	15.44	43.50	28.06	100.0	H	233.0	-19.1
305.286000	23.51	46.00	22.49	100.0	H	59.0	-16.1
809.249500	28.53	46.00	17.47	100.0	H	0.0	-6.2

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

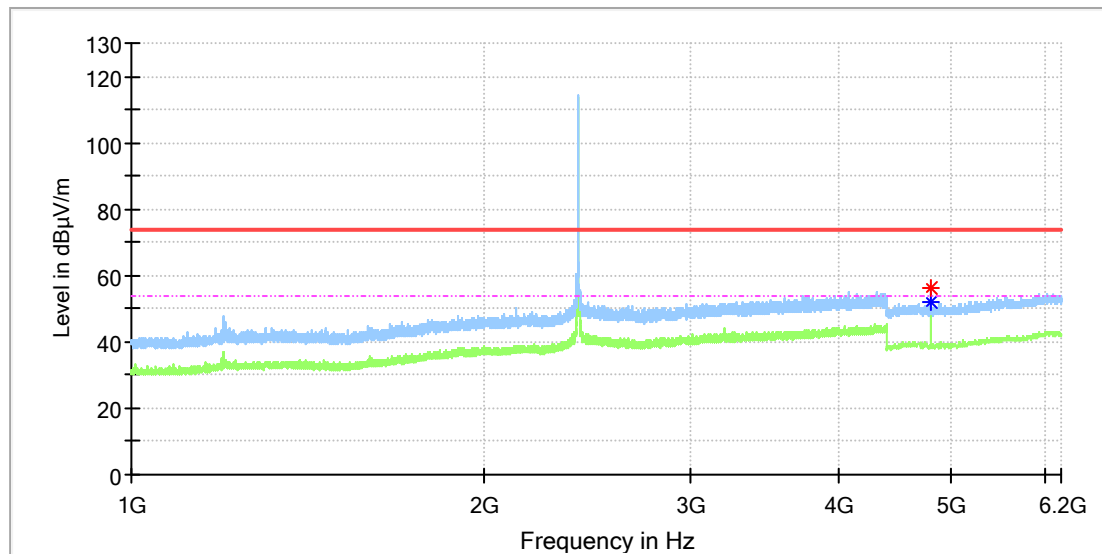
Frequency (MHz)	MaxPeak (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
37.517500	24.76	40.00	15.24	100.0	V	171.0	-21.0
48.769500	25.12	40.00	14.88	100.0	V	333.0	-18.4
115.602500	20.01	43.50	23.49	100.0	V	0.0	-19.9
400.006500	22.74	46.00	23.26	100.0	V	46.0	-13.6
861.532500	28.87	46.00	17.13	100.0	V	125.0	-5.3

1GHz - 18GHz

Note: The highest waveform in the figure is Bluetooth Fundamental.

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

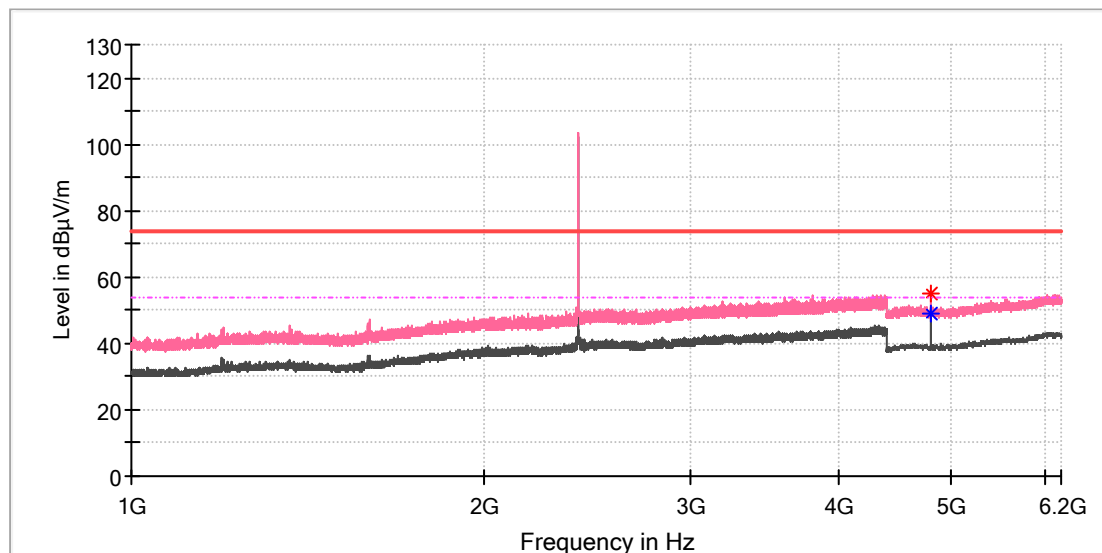


Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4804.000000	---	51.83	54.00	2.17	100.0	H	68.0	11.8
4804.000000	56.44	---	74.00	17.56	100.0	H	68.0	11.8

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

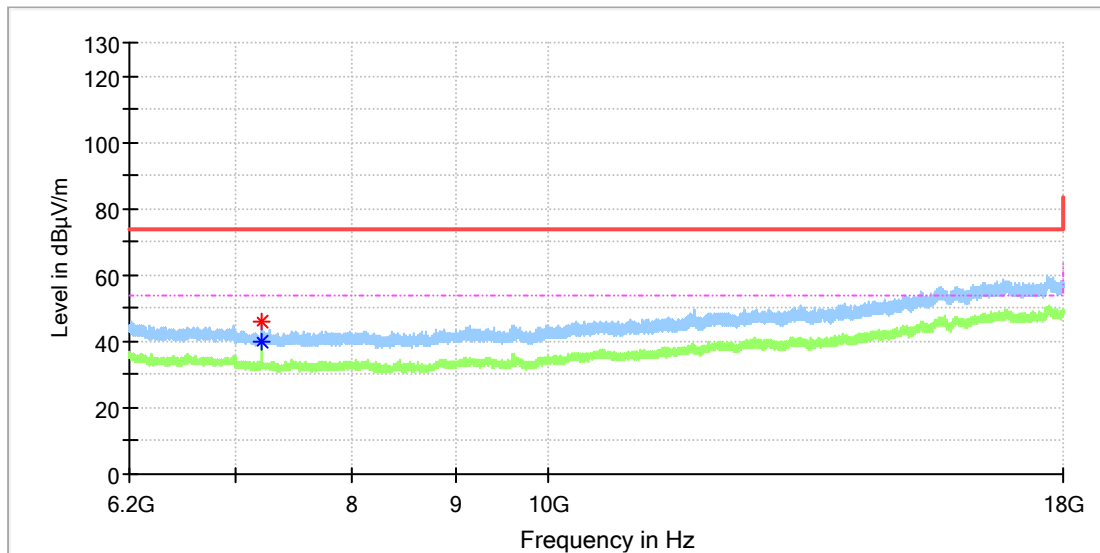


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4804.000000	54.99	---	74.00	19.01	100.0	V	85.0	11.8
4804.000000	---	48.94	54.00	5.06	100.0	V	85.0	11.8

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

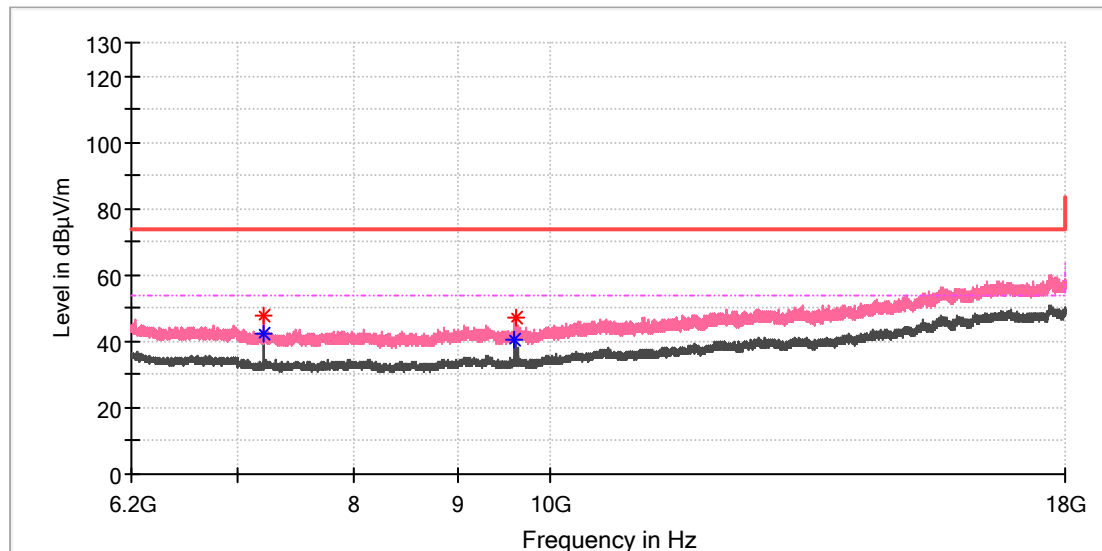


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7205.950000	---	39.96	54.00	14.04	100.0	H	233.0	8.8
7206.933333	45.72	---	74.00	28.28	100.0	H	233.0	8.8

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

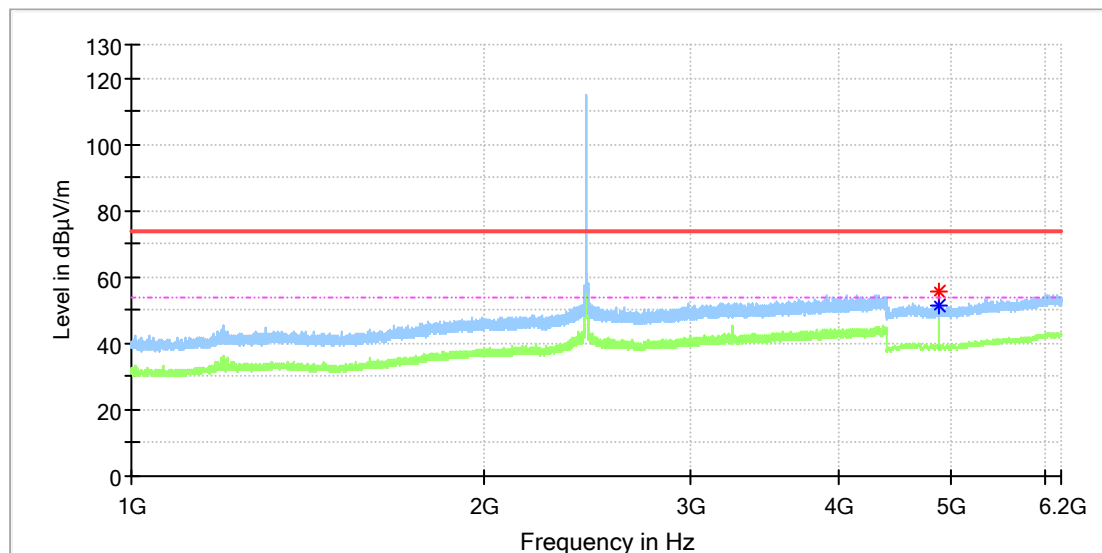


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7205.458333	47.74	---	74.00	26.26	100.0	V	184.0	8.8
7205.458333	---	42.08	54.00	11.92	100.0	V	184.0	8.8
9607.250000	---	40.55	54.00	13.45	100.0	V	184.0	10.4
9609.216667	46.92	---	74.00	27.08	100.0	V	232.0	10.4

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

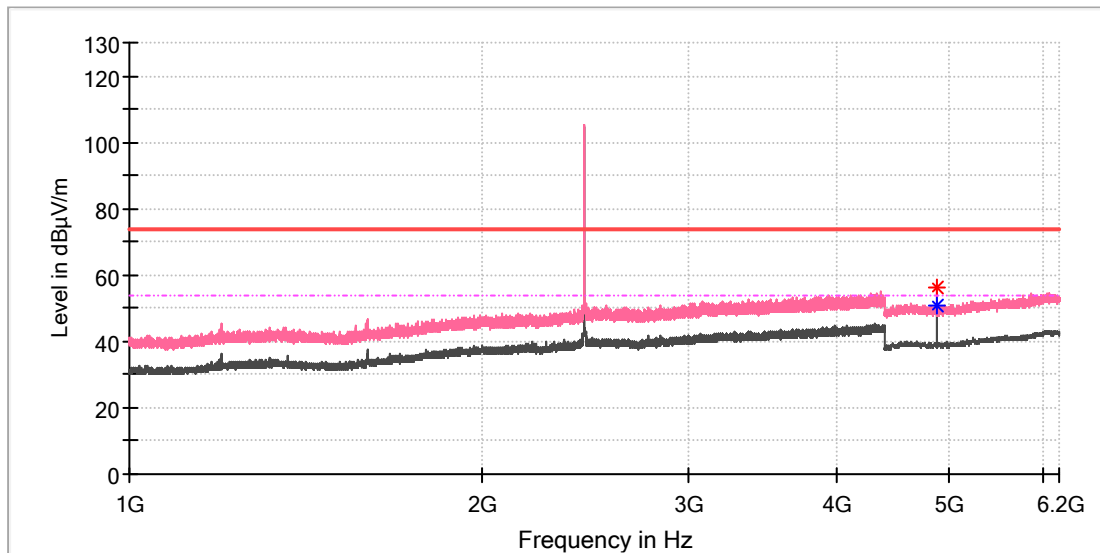


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4884.000000	---	51.40	54.00	2.60	100.0	H	125.0	11.8
4884.000000	55.93	---	74.00	18.07	100.0	H	125.0	11.8

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

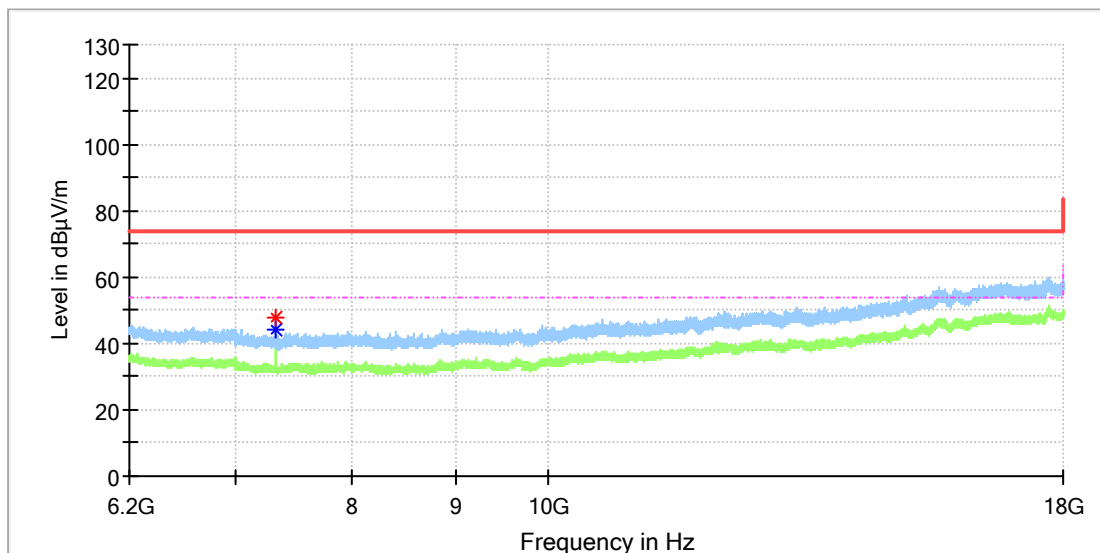


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4884.000000	---	51.04	54.00	2.96	100.0	V	49.0	11.8
4884.500000	56.28	---	74.00	17.72	100.0	V	125.0	11.8

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

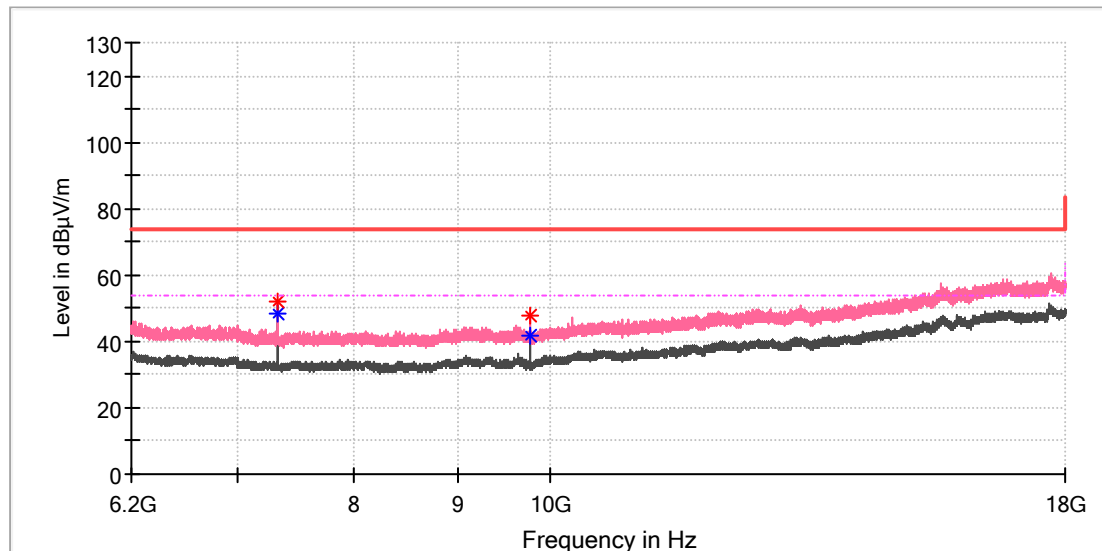


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7324.933333	47.84	---	74.00	26.16	100.0	H	265.0	8.2
7325.425000	---	43.92	54.00	10.08	100.0	H	265.0	8.2

EUT Information

EUT Name: Degrii Smart Thermostat
Model: THM
Test Mode: BLE 1M_Mid channel
Order No/Sample No: 168392703/A003345059-001
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin

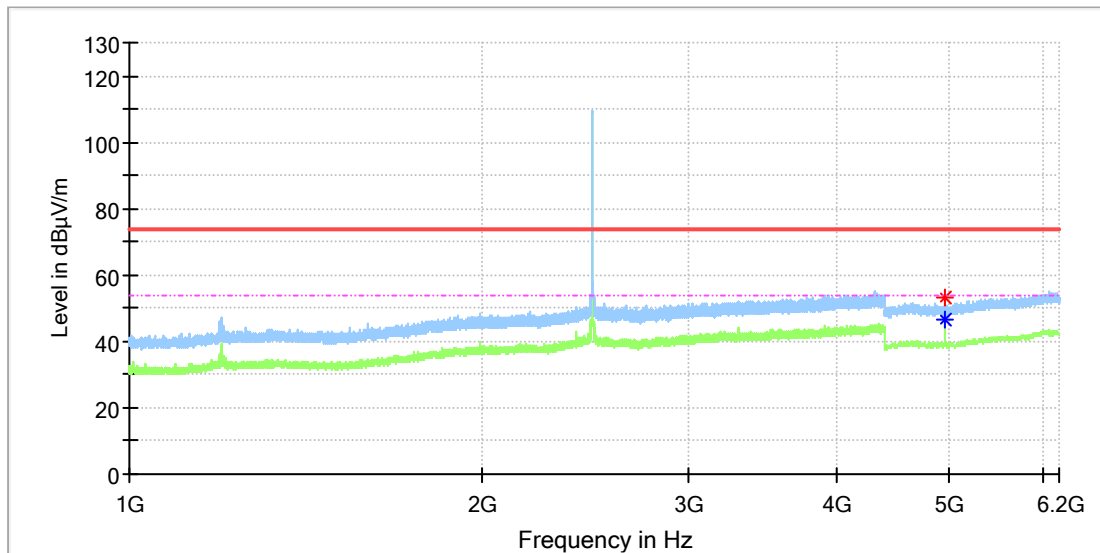


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7325.425000	52.00	---	74.00	22.00	100.0	V	150.0	8.2
7325.425000	---	48.27	54.00	5.73	100.0	V	150.0	8.2
9768.516667	47.86	---	74.00	26.14	100.0	V	150.0	10.4
9769.008333	---	41.88	54.00	12.12	100.0	V	185.0	10.4

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

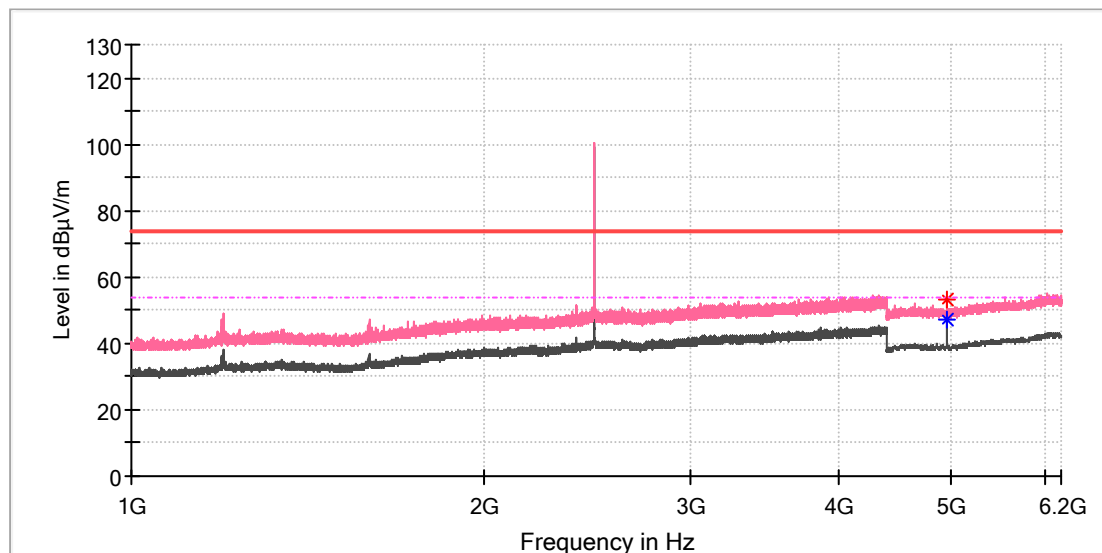


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4960.000000	---	46.76	54.00	7.24	100.0	H	256.0	11.8
4960.500000	52.98	---	74.00	21.02	100.0	H	291.0	11.8

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

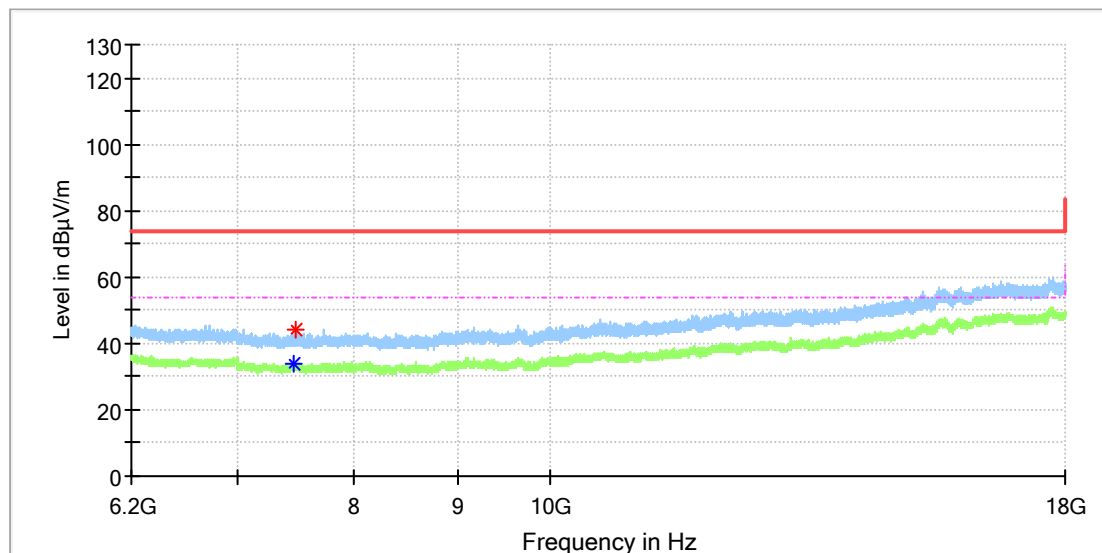


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4960.000000	---	47.13	54.00	6.87	100.0	V	315.0	11.8
4960.500000	52.97	---	74.00	21.03	100.0	V	315.0	11.8

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

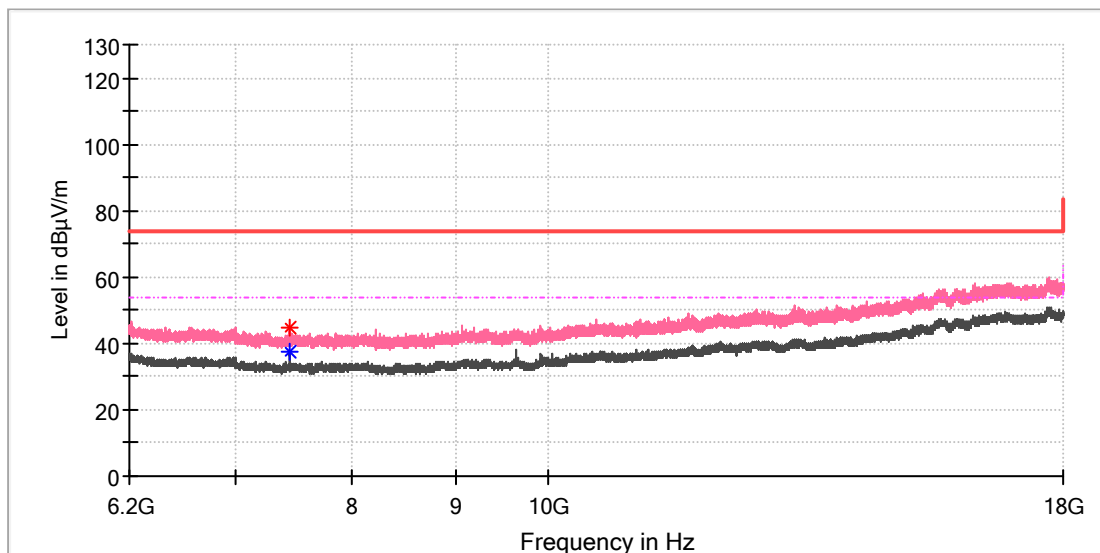


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7460.633333	---	34.02	54.00	19.98	100.0	H	186.0	8.5
7482.266667	43.99	---	74.00	30.01	100.0	H	120.0	8.7

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



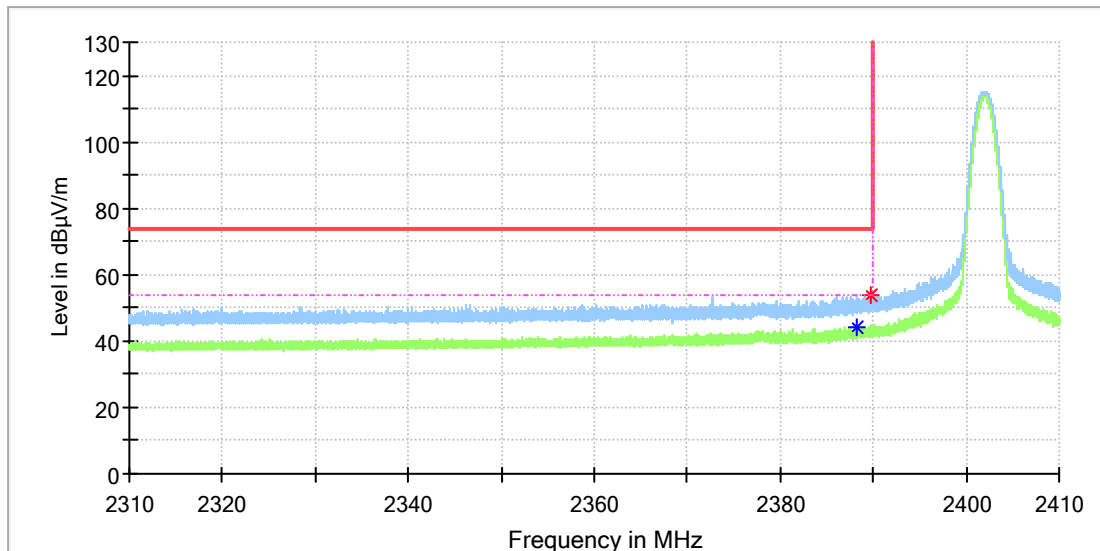
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7439.491667	44.68	---	74.00	29.32	100.0	V	6.0	8.4
7439.491667	---	37.64	54.00	16.36	100.0	V	6.0	8.4

Appendix B.6: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

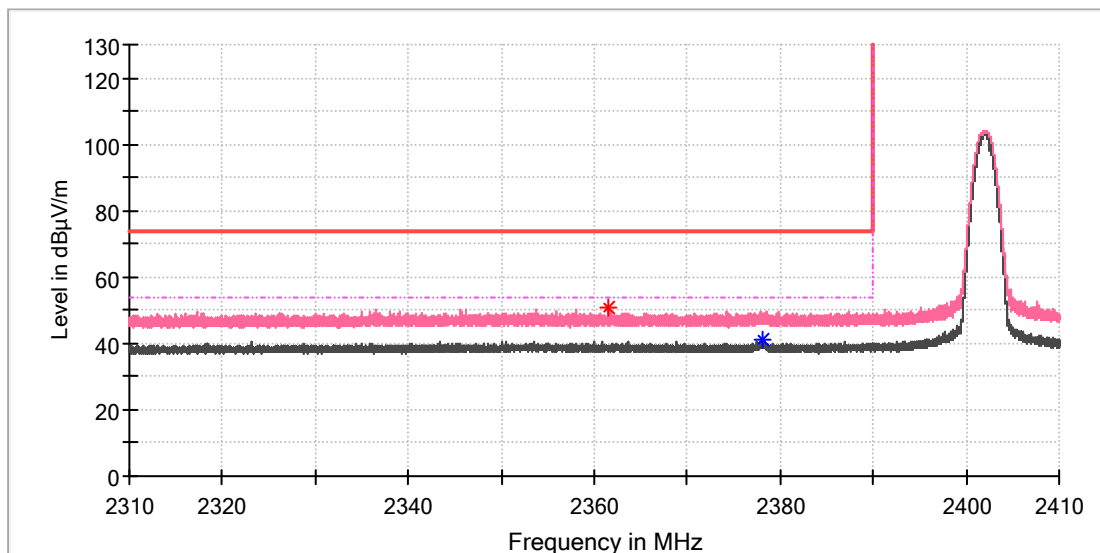


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2388.295000	---	44.43	54.00	9.57	100.0	H	68.0	7.0
2389.820000	53.81	---	74.00	20.19	100.0	H	68.0	7.0

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

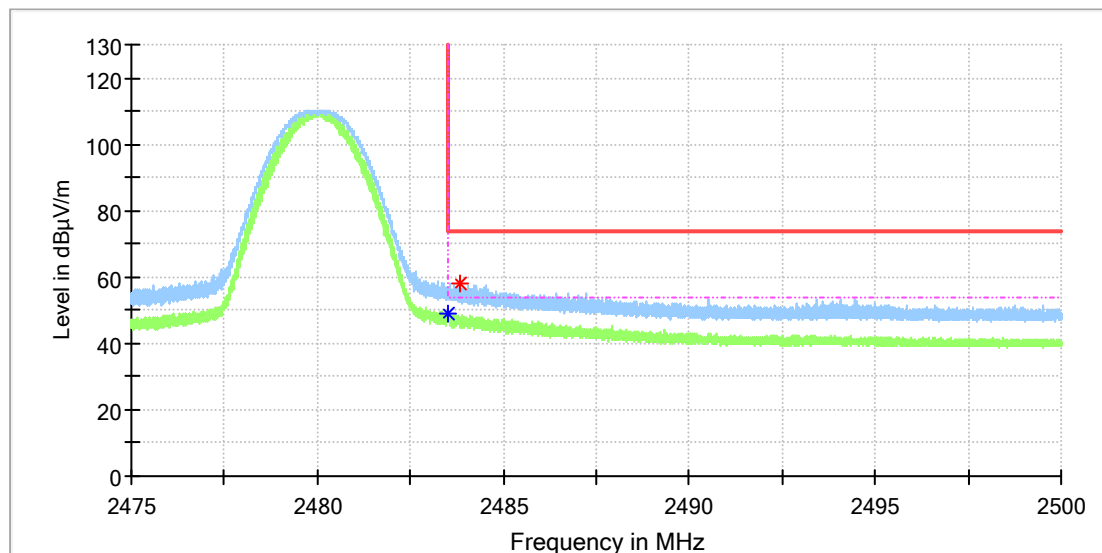


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2361.495000	50.81	---	74.00	23.19	100.0	V	281.0	6.9
2378.180000	---	41.11	54.00	12.89	100.0	V	281.0	6.9

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

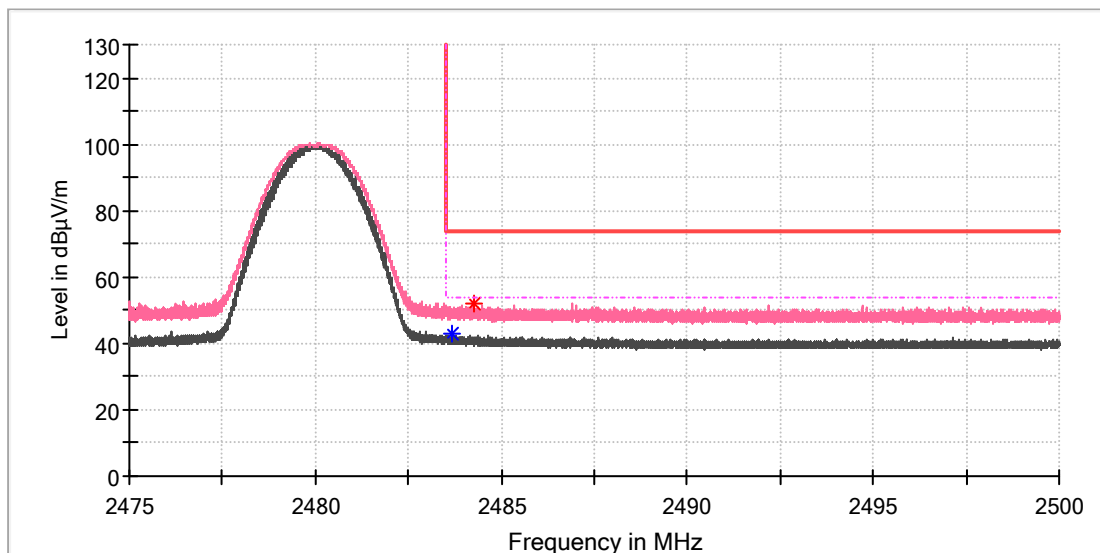


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.536250	---	49.15	54.00	4.85	100.0	H	131.0	7.4
2483.823750	58.00	---	74.00	16.00	100.0	H	131.0	7.4

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



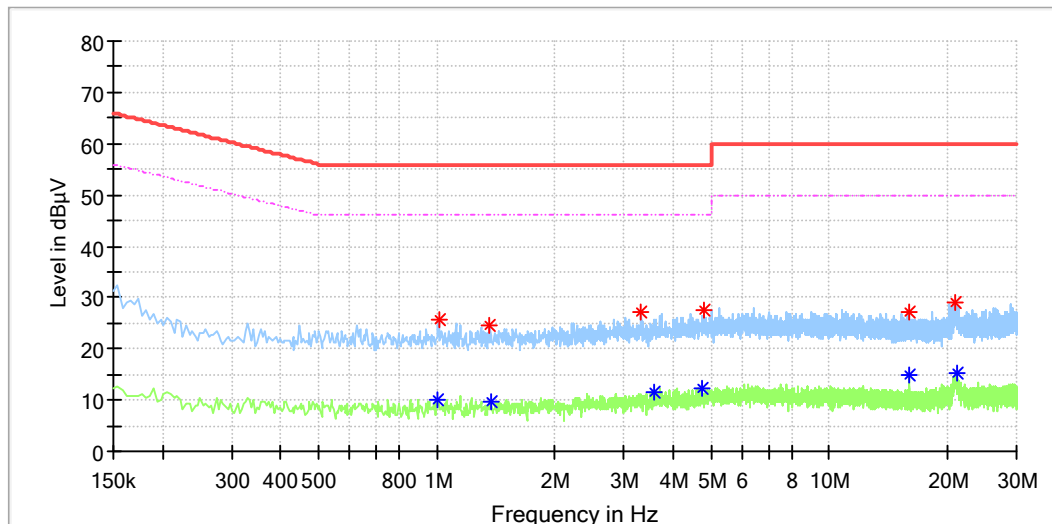
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.686250	---	42.79	54.00	11.21	100.0	V	209.0	7.4
2484.288750	52.03	---	74.00	21.97	100.0	V	99.0	7.4

Appendix B.7: Test Results of Conducted Emission on AC Mains

EUT Information

EUT Name:	Degrii Smart Thermostat
Order Number:	168392703
Model:	THM
Test Mode:	ON (Bluetooth and wifi connected)
Test Voltage:	AC 120V/60Hz
Test By:/Review By:	Kevin Zhou/Gary Chen
Test Standard:	FCC Part 15
Tem./Hum./Pressure:	24.6°C/49.5%/101kPa
Remark:	SR2

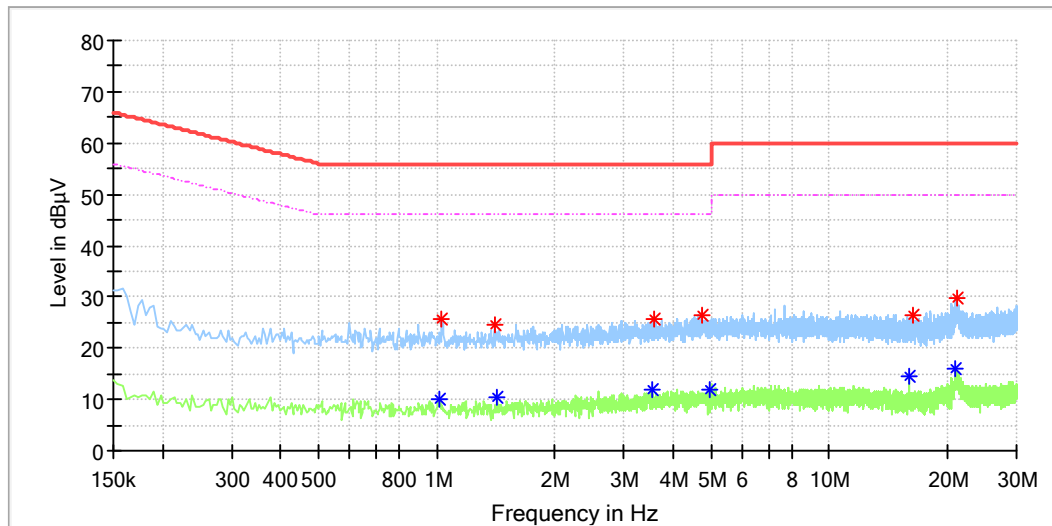


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
1.006000	---	9.92	46.00	36.08	L1	10.0
1.010000	25.82	---	56.00	30.18	L1	10.0
1.366000	24.48	---	56.00	31.52	L1	10.1
1.374000	---	9.78	46.00	36.22	L1	10.1
3.326000	27.00	---	56.00	29.00	L1	10.2
3.594000	---	11.71	46.00	34.29	L1	10.2
4.758000	---	12.29	46.00	33.71	L1	10.2
4.774000	27.53	---	56.00	28.47	L1	10.2
16.002000	---	14.81	50.00	35.19	L1	10.4
16.002000	27.06	---	60.00	32.94	L1	10.4
20.854000	29.08	---	60.00	30.92	L1	10.4
21.118000	---	15.40	50.00	34.60	L1	10.4

EUT Information

EUT Name: Degrii Smart Thermostat
Order Number: 168392703
Model: THM
Test Mode: ON (Bluetooth and wifi connected)
Test Voltage: AC 120V/60Hz
Test By:/Review By: Kevin Zhou/Gary Chen
Test Standard: FCC Part 15
Tem./Hum./Pressure: 24.6°C/49.5%/101kPa
Remark: SR2



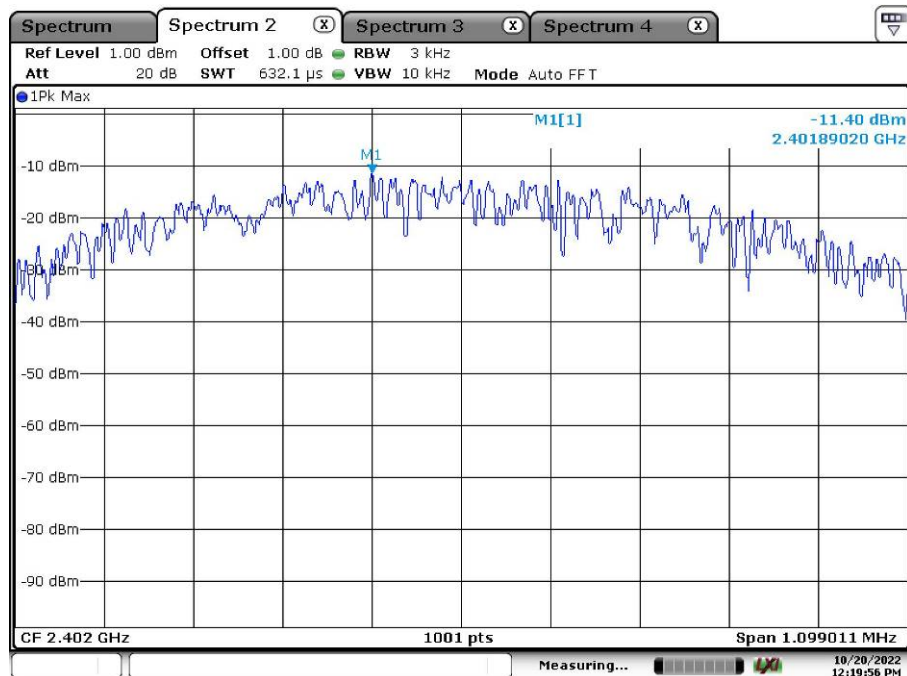
Critical_Freqs

Frequency (MHz)	MaxPeak (dBµV)	Average (dBµV)	Limit (dBµV)	Margin (dB)	Line	Corr. (dB)
1.018000	---	10.13	46.00	35.87	N	9.8
1.030000	25.60	---	56.00	30.40	N	9.8
1.402000	24.57	---	56.00	31.43	N	9.8
1.430000	---	10.33	46.00	35.67	N	9.8
3.554000	---	11.81	46.00	34.19	N	9.9
3.574000	25.63	---	56.00	30.37	N	9.9
4.750000	26.31	---	56.00	29.69	N	9.9
4.962000	---	12.07	46.00	33.93	N	9.9
15.998000	---	14.66	50.00	35.34	N	10.2
16.374000	26.38	---	60.00	33.62	N	10.2
20.962000	---	16.04	50.00	33.96	N	10.3
21.178000	29.94	---	60.00	30.06	N	10.3

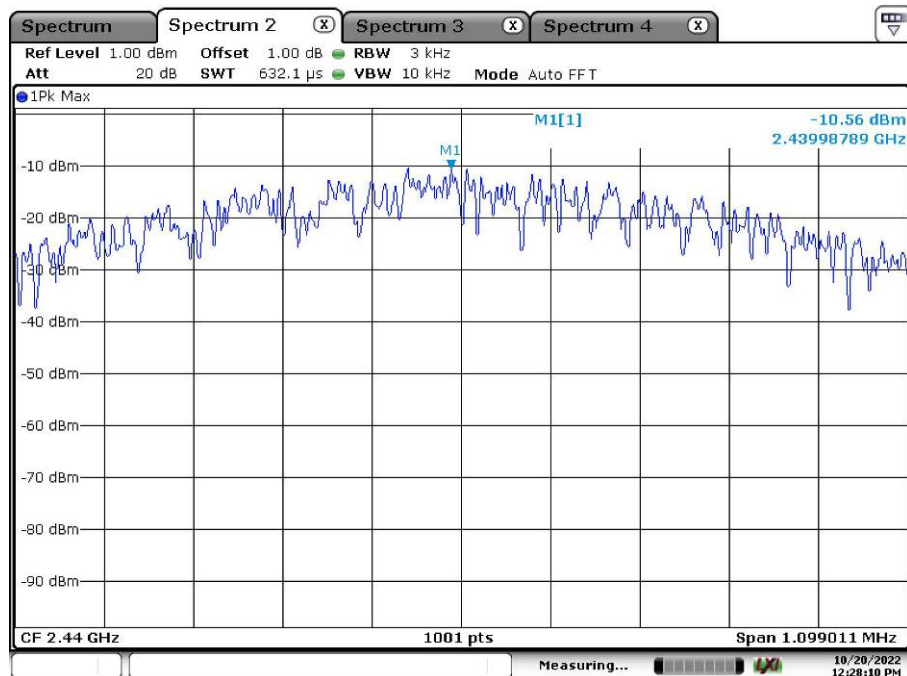
Appendix C: Test Results of BLE (WBR1)

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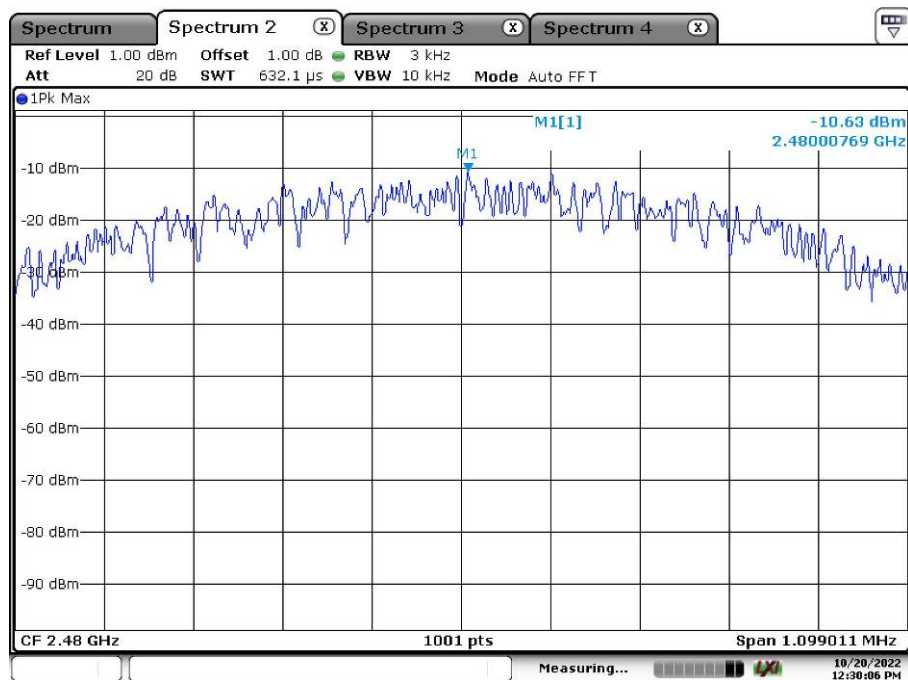
Appendix C.1: Test Results of Conducted Power Spectral Density



Date: 20.OCT.2022 12:19:56



Date: 20.OCT.2022 12:28:10



Date: 20.OCT.2022 12:30:05

Appendix C.2: Test Results of 6dB Bandwidth

Minimum Emission Bandwidth 6 dB (2402 MHz; 10.000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

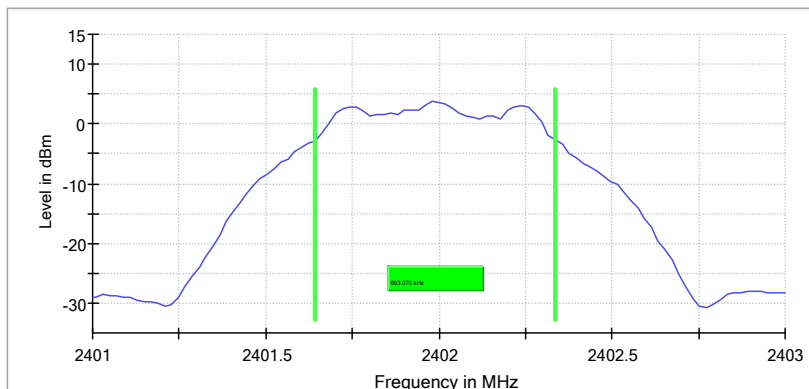
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	0.693070	0.500000	---	2401.643564	2402.336634

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2402.000000	3.7	PASS

6 dB Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
SweepTime	18.938 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.03 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2440 MHz; 10.000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

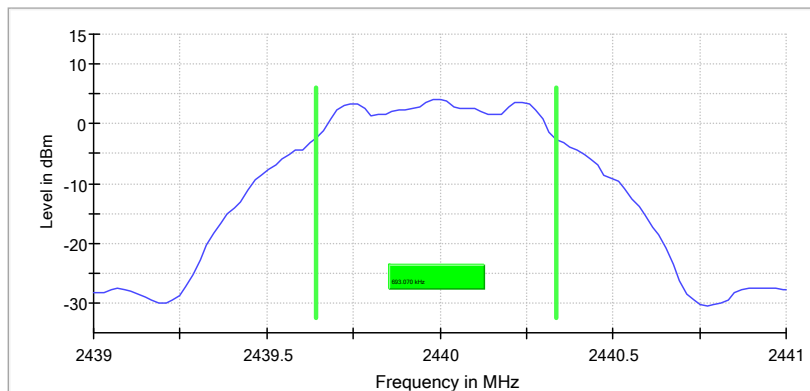
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2440.000000	0.693070	0.500000	---	2439.643564	2440.336634

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2440.000000	4.2	PASS

6 dB Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43900 GHz	2.43900 GHz
Stop Frequency	2.44100 GHz	2.44100 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
SweepTime	18.938 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	9 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.02 dB	0.50 dB

Minimum Emission Bandwidth 6 dB (2480 MHz; 10.000 dBm; 1 MHz)

Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

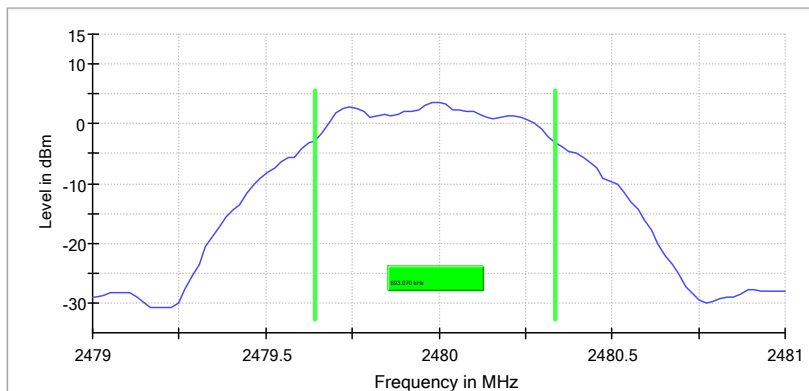
6 dB Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	0.693070	0.500000	---	2479.643564	2480.336634

(continuation of the "6 dB Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Max Level (dBm)	Result
2480.000000	3.6	PASS

6 dB Bandwidth



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	100.000 kHz	~ 100.000 kHz
VBW	300.000 kHz	~ 300.000 kHz
SweepPoints	101	~ 40
SweepTime	18.938 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.50 dB	0.50 dB
Run	8 / max. 150	max. 150
Stable	5 / 5	5
Max Stable Difference	0.05 dB	0.50 dB

Appendix C.3: Test Results of 99% Bandwidth

Occupied Channel Bandwidth 99% (2402 MHz; 10.000 dBm; 1 MHz)

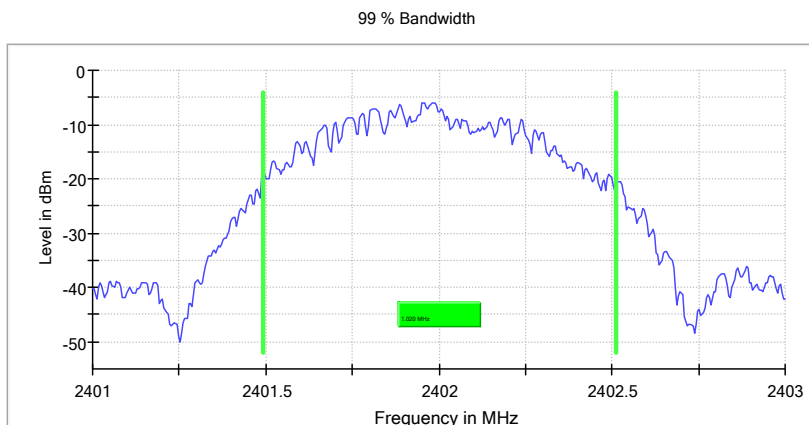
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2402.000000	1.020000	---	---	2401.492500	2402.512500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2402.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.40100 GHz	2.40100 GHz
Stop Frequency	2.40300 GHz	2.40300 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweptime	189.648 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamp	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	6 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.10 dB	0.30 dB

Occupied Channel Bandwidth 99% (2440 MHz; 10.000 dBm; 1 MHz)

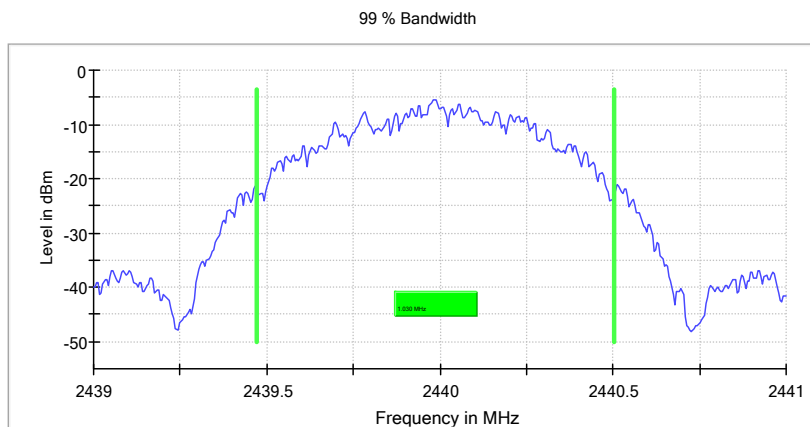
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2440.000000	1.030000	---	---	2439.472500	2440.502500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2440.000000	PASS



Measurement

Setting	Instrument Value	Target Value
Start Frequency	2.43900 GHz	2.43900 GHz
Stop Frequency	2.44100 GHz	2.44100 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
SweepTime	189.648 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.13 dB	0.30 dB

Occupied Channel Bandwidth 99% (2480 MHz; 10.000 dBm; 1 MHz)

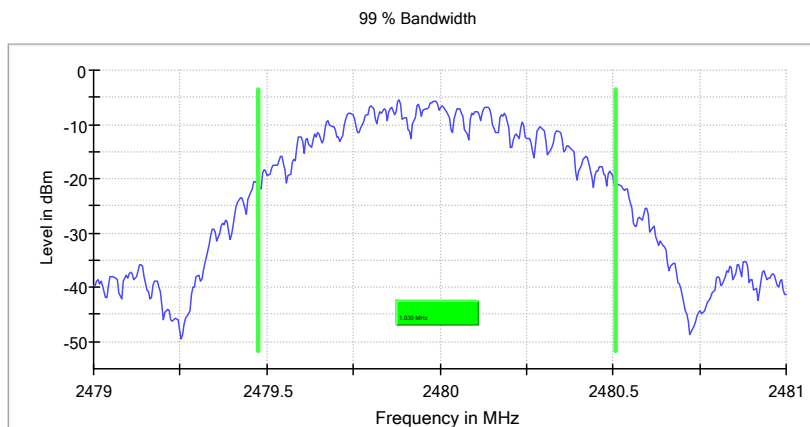
Test according to FCC title 47 part 15 §15.247(a), KDB 558074 D01 DTS Meas Guidance v04 and ANSI C63.10-2013

99 % Bandwidth

DUT Frequency (MHz)	Bandwidth (MHz)	Limit Min (MHz)	Limit Max (MHz)	Band Edge Left (MHz)	Band Edge Right (MHz)
2480.000000	1.030000	---	---	2479.477500	2480.507500

(continuation of the "99 % Bandwidth" table from column 6 ...)

DUT Frequency (MHz)	Result
2480.000000	PASS

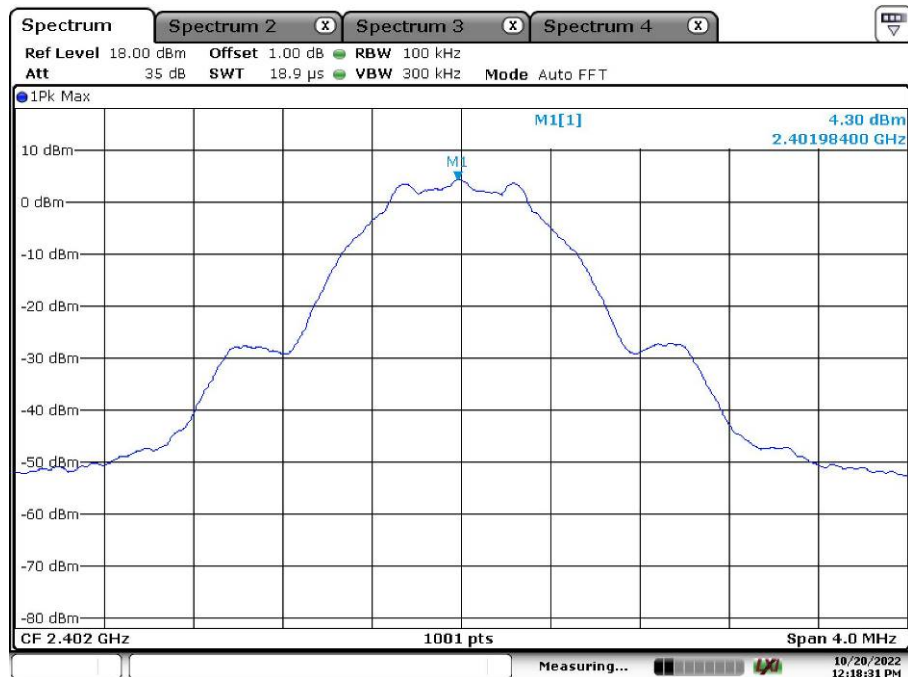


Measurement

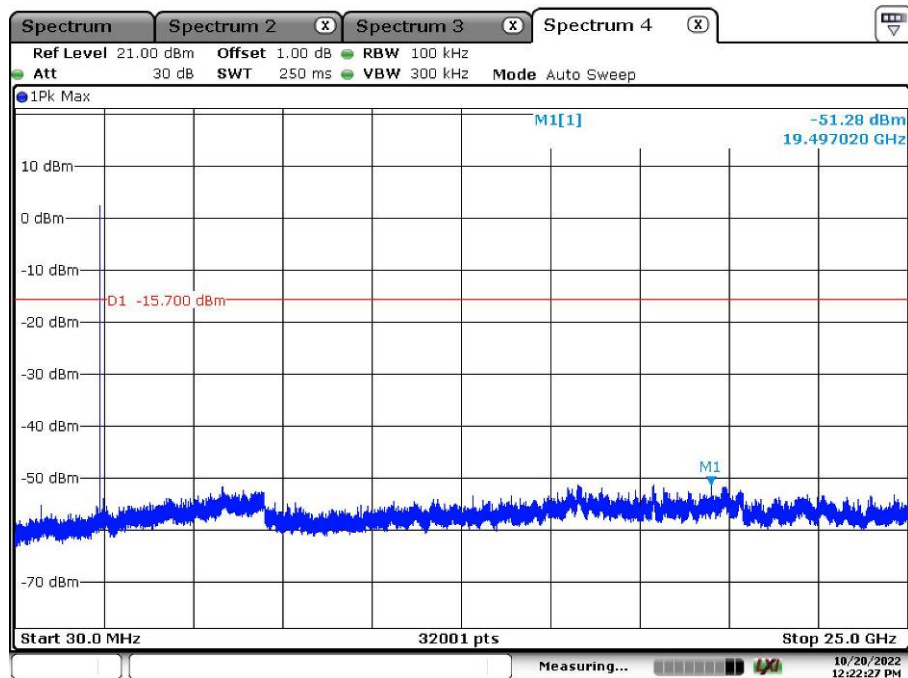
Setting	Instrument Value	Target Value
Start Frequency	2.47900 GHz	2.47900 GHz
Stop Frequency	2.48100 GHz	2.48100 GHz
Span	2.000 MHz	2.000 MHz
RBW	10.000 kHz	>= 10.000 kHz
VBW	30.000 kHz	>= 30.000 kHz
SweepPoints	400	~ 400
Sweeptime	189.648 µs	AUTO
Reference Level	0.000 dBm	0.000 dBm
Attenuation	20.000 dB	AUTO
Detector	MaxPeak	MaxPeak
SweepCount	100	100
Filter	3 dB	3 dB
Trace Mode	Max Hold	Max Hold
SweepType	FFT	AUTO
Preamplifier	off	off
Stablemode	Trace	Trace
Stablevalue	0.30 dB	0.30 dB
Run	5 / max. 150	max. 150
Stable	3 / 3	3
Max Stable Difference	0.14 dB	0.30 dB

Appendix C.4: Test Results of Conducted Spurious Emissions Measured in 100 kHz Bandwidth

Low Channel:

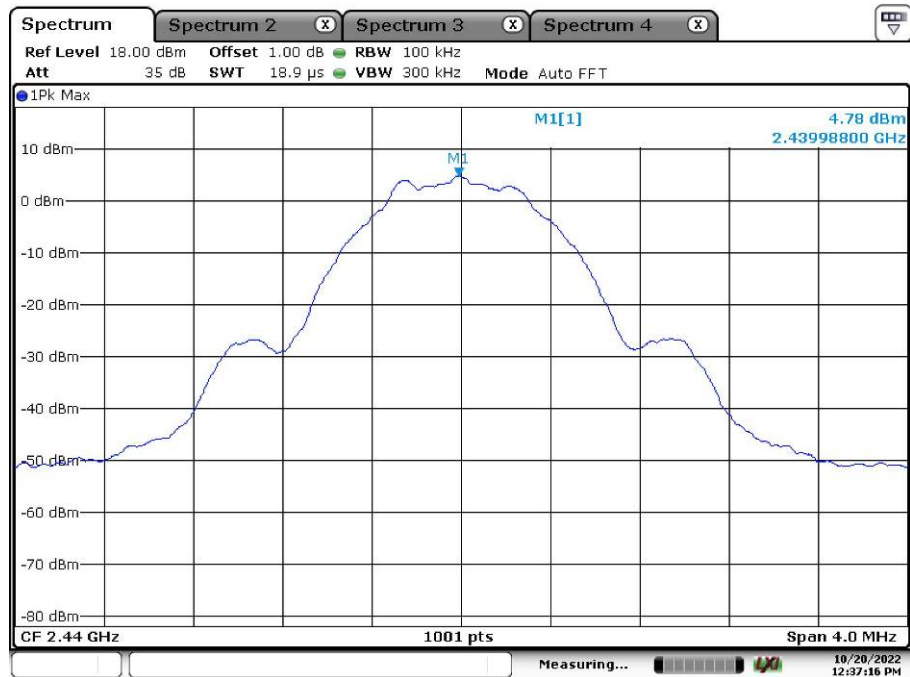


Date: 20.OCT.2022 12:18:31

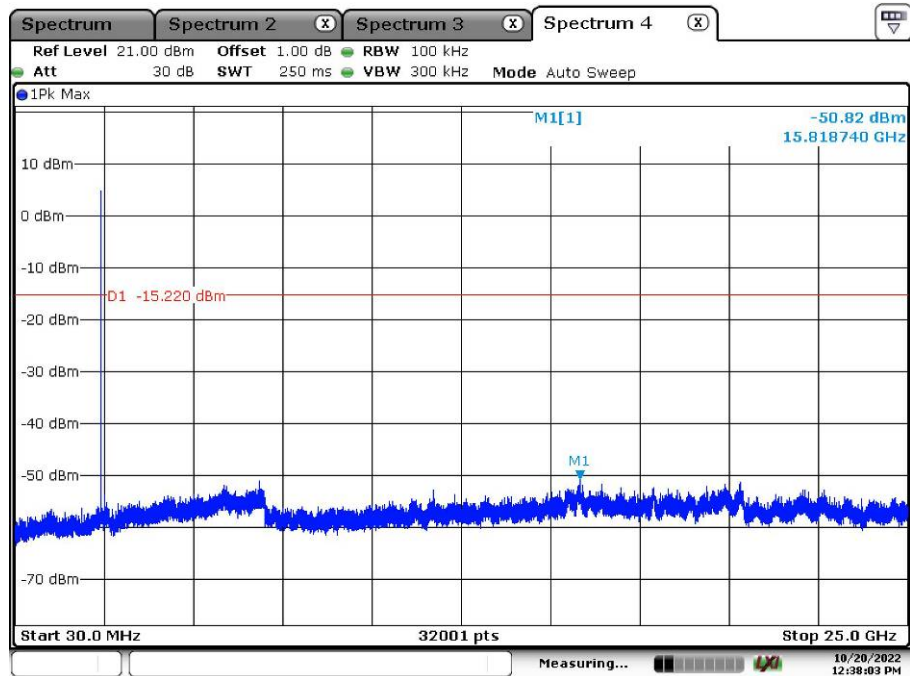


Date: 20.OCT.2022 12:22:27

Middle Channel:

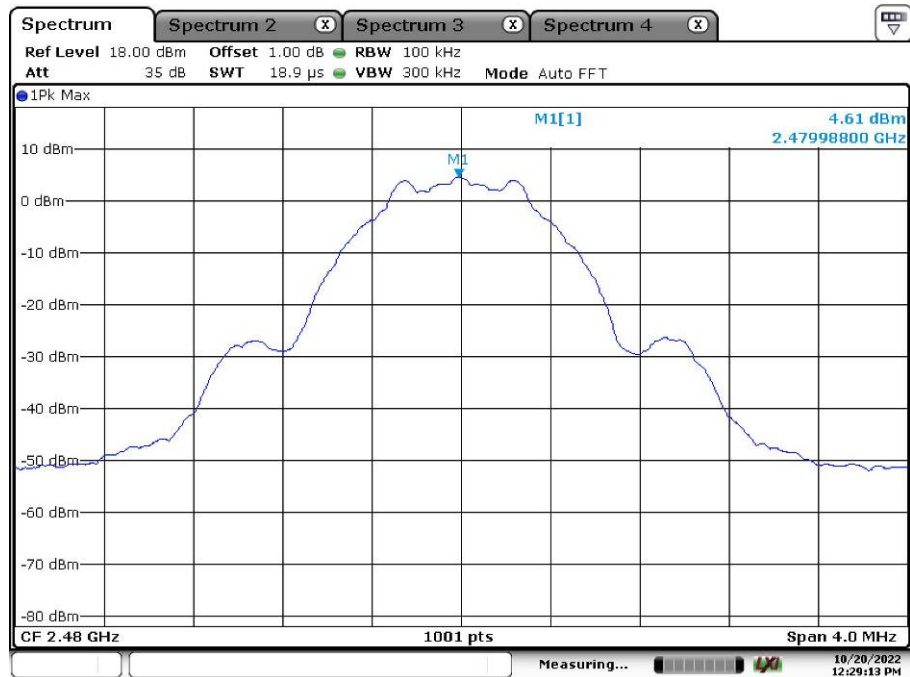


Date: 20.OCT.2022 12:37:16

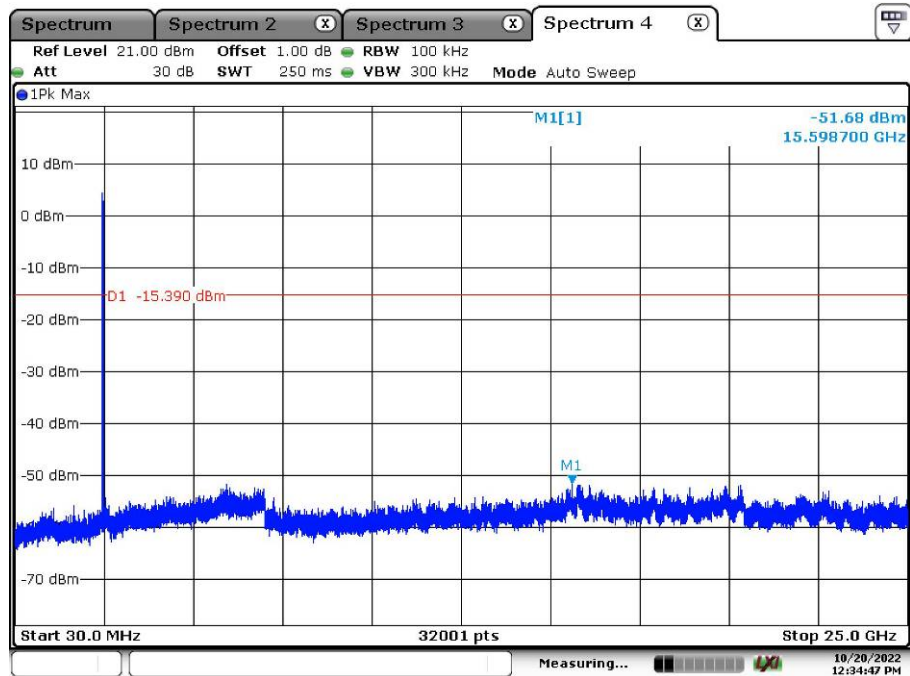


Date: 20.OCT.2022 12:38:03

High Channel:

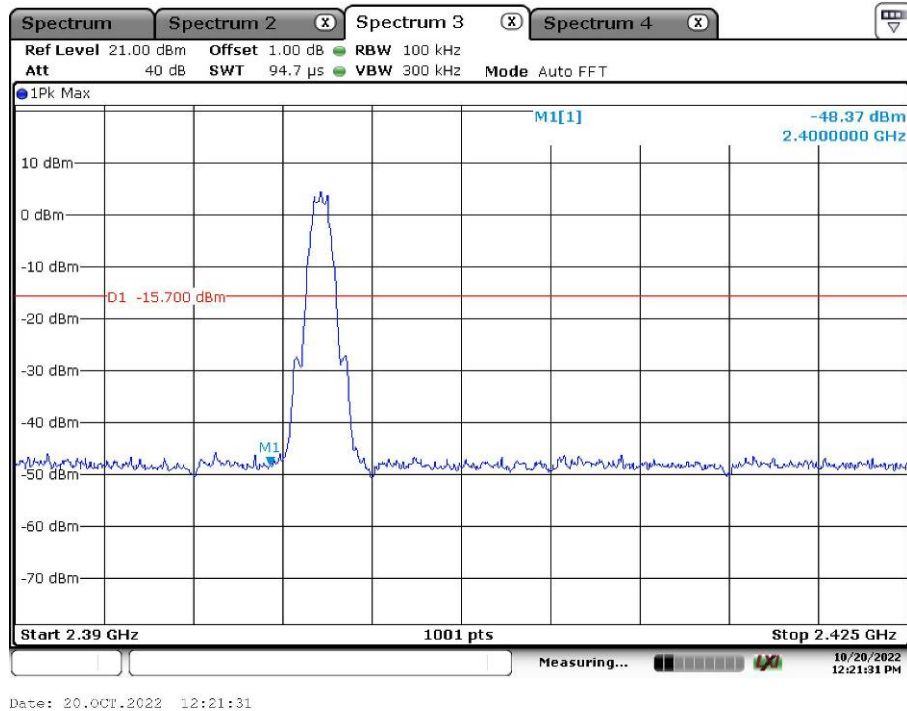


Date: 20.OCT.2022 12:29:12

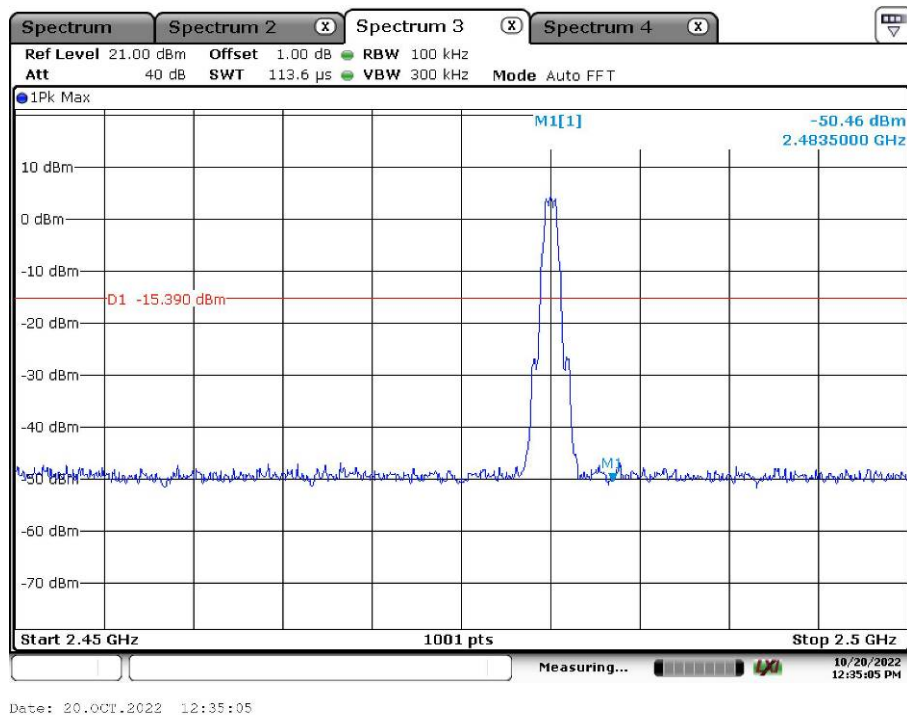


Date: 20.OCT.2022 12:34:47

Band Edge, Low Channel:



Band Edge, High Channel:



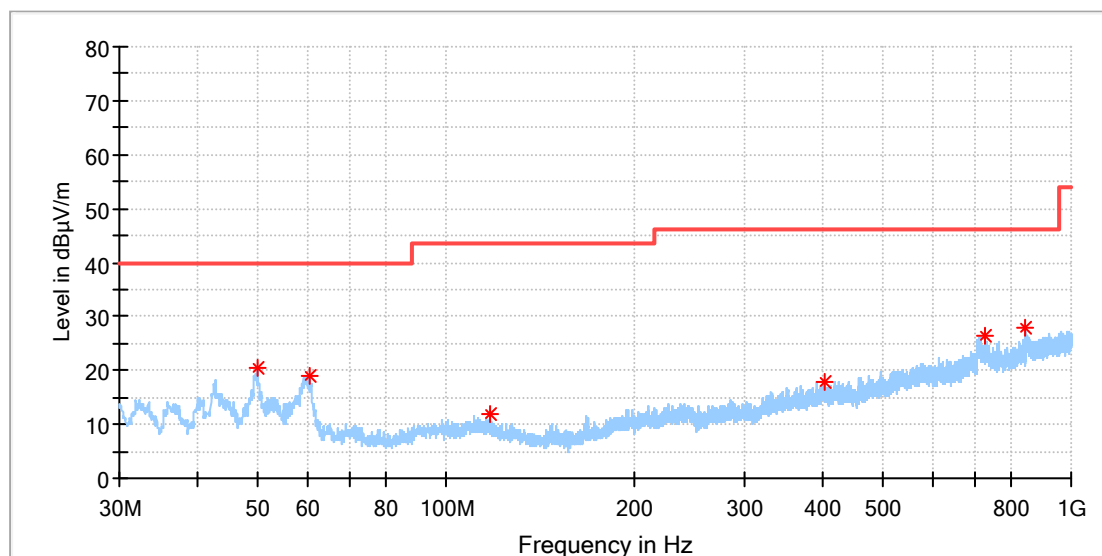
Appendix C.5: Test Results of Radiated Spurious Emissions

Note: Testing was carried out within frequency range 9kHz to the tenth harmonics. The measurement results below 30MHz and above 18GHz were greater than 20dB below the limit, so only the radiated spurious emissions from 30MHz to 18GHz were reported.

30 MHz - 1GHz

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Mid channel
Test Voltage:	168392703/A003345059-001
Remark:	120V/60Hz
Test Standard:	Temp 23 Humi:56%
Tested By:	FCC 15.247
Reviewed By:	Kei Zhang Terry Yin

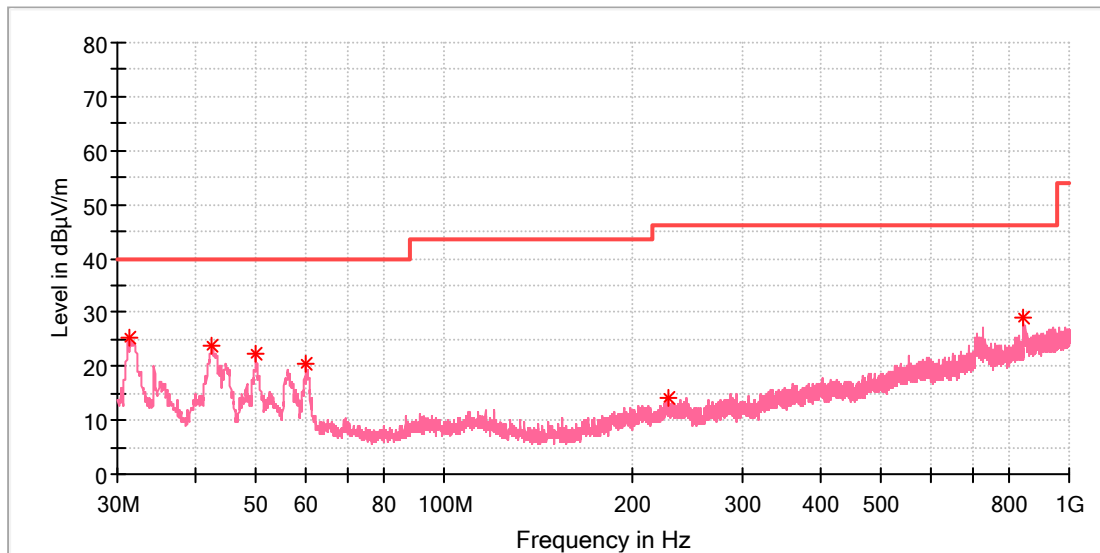


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
49.982000	20.39	---	40.00	19.61	100.0	H	0.0	-18.6
60.409500	18.85	---	40.00	21.15	100.0	H	208.0	-19.4
117.397000	12.05	---	43.50	31.45	100.0	H	112.0	-20.5
402.140500	17.81	---	46.00	28.19	100.0	H	63.0	-14.1
728.836500	26.32	---	46.00	19.68	100.0	H	332.0	-7.9
844.848500	27.75	---	46.00	18.25	100.0	H	95.0	-6.0

EUT Information

EUT Name: Degrii Smart Thermostat
Model: THM
Test Mode: BLE 1M_Mid channel
Test Voltage: 168392703/A003345059-001
Remark: 120V/60Hz
Test Standard: Temp 23 Humi:56%
Tested By: FCC 15.247
Reviewed By: Kei Zhang
Terry Yin



Critical Freqs

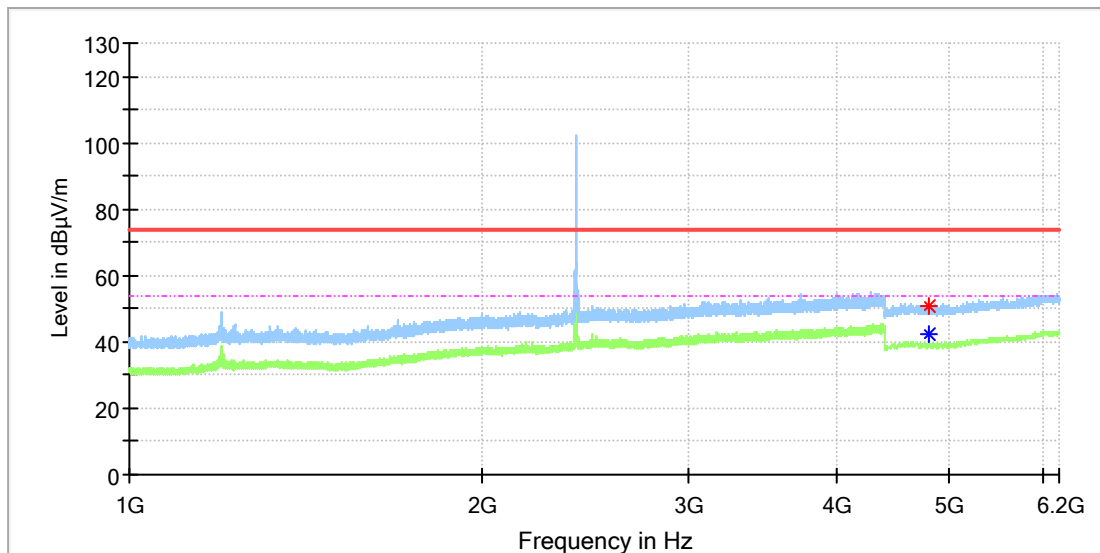
Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
31.261000	25.46	---	40.00	14.54	100.0	V	203.0	-23.1
42.561500	23.74	---	40.00	16.26	100.0	V	316.0	-19.7
49.982000	22.44	---	40.00	17.56	100.0	V	90.0	-18.6
60.118500	20.36	---	40.00	19.64	100.0	V	241.0	-19.3
228.365000	14.24	---	46.00	31.76	100.0	V	213.0	-18.5
845.042500	28.93	---	46.00	17.07	100.0	V	271.0	-6.0

1GHz - 18GHz

Note: The highest waveform in the figure is Bluetooth Fundamental.

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

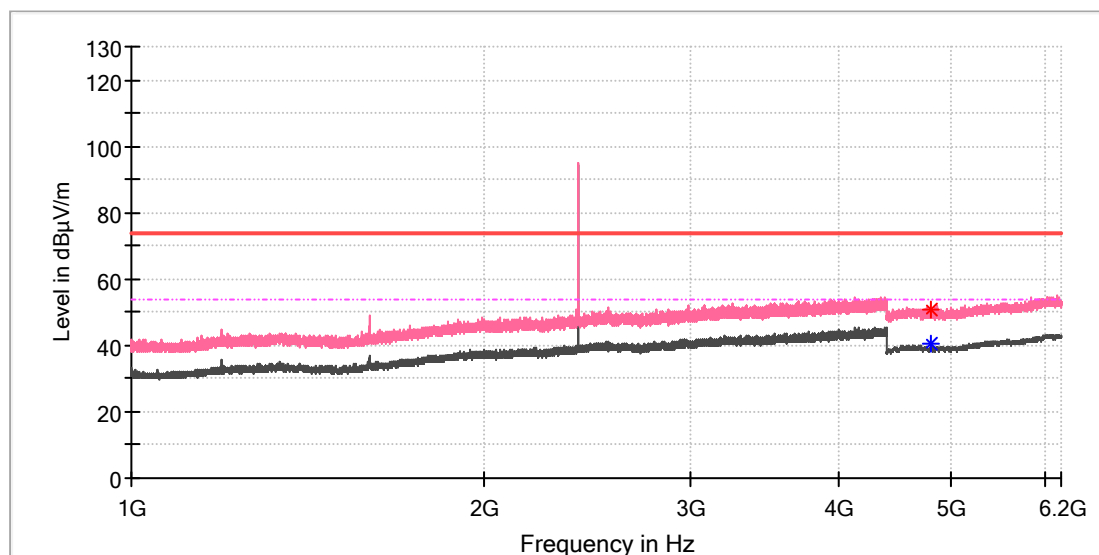


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4803.000000	50.94	---	74.00	23.06	100.0	H	42.0	11.8
4804.000000	---	42.24	54.00	11.76	100.0	H	127.0	11.8

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

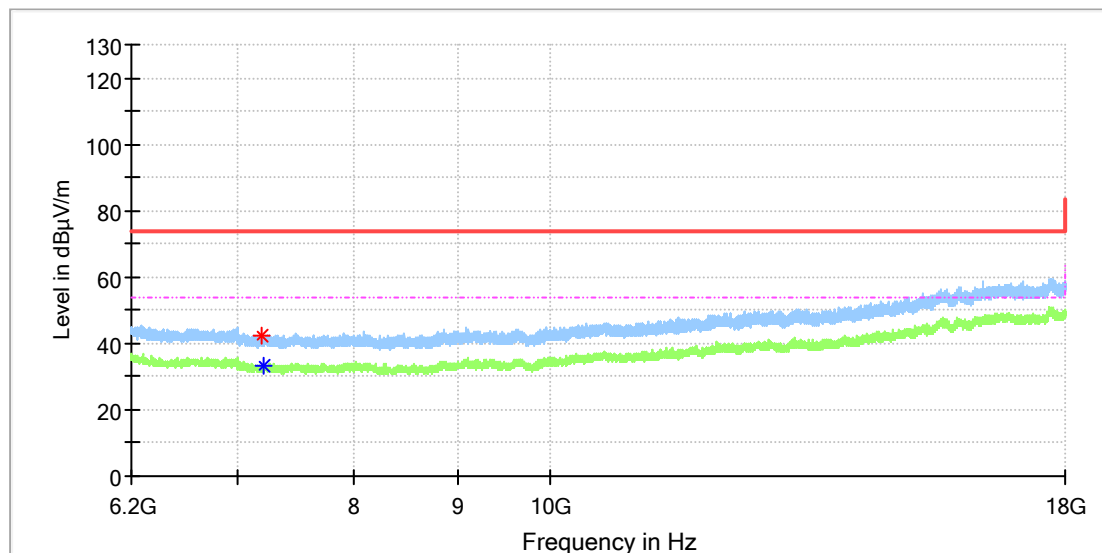


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4803.500000	---	40.51	54.00	13.49	100.0	V	270.0	11.8
4806.000000	50.49	---	74.00	23.51	100.0	V	249.0	11.8

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

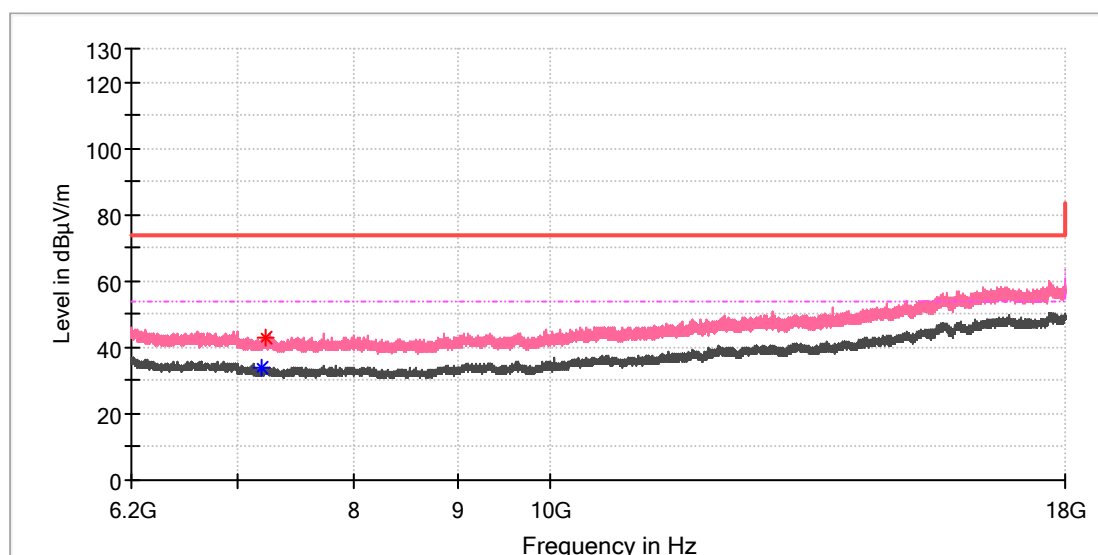


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7201.525000	42.04	---	74.00	31.96	100.0	H	194.0	8.8
7211.850000	---	33.46	54.00	20.54	100.0	H	158.0	8.7

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

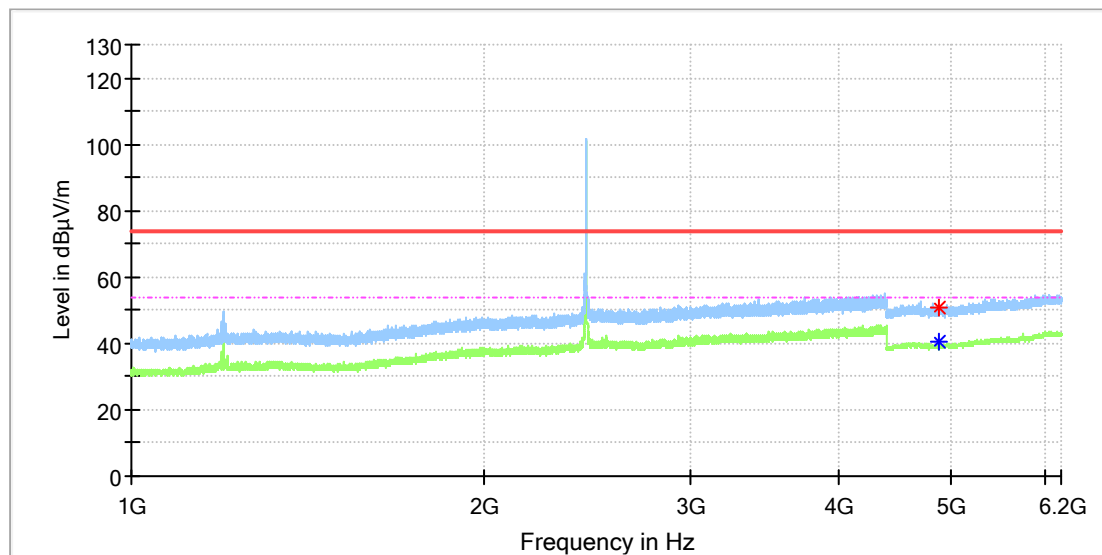


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7200.541667	---	33.94	54.00	20.06	100.0	V	55.0	8.8
7226.108333	42.88	---	74.00	31.12	100.0	V	249.0	8.7

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

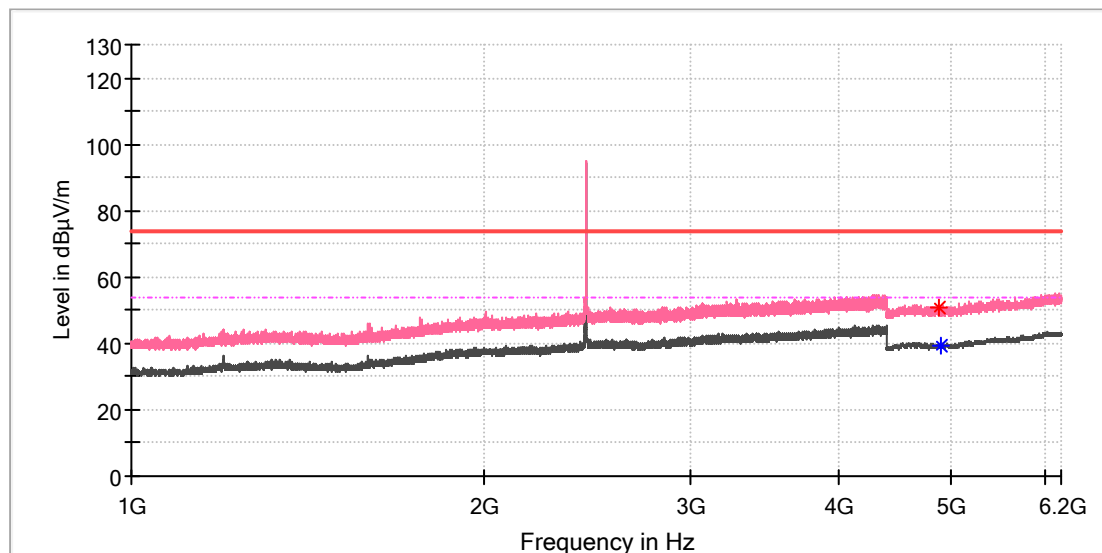


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4879.500000	---	40.61	54.00	13.39	100.0	H	300.0	11.8
4885.500000	50.73	---	74.00	23.27	100.0	H	293.0	11.8

EUT Information

EUT Name: Degrii Smart Thermostat
Model: THM
Test Mode: BLE 1M_Mid channel
Order No/Sample No: 168392703/A003345059-001
Test Voltage: 120V/60Hz
Remark: Temp 23 Humi:56%
Test Standard: FCC 15.247
Tested By: Kei Zhang
Reviewed By: Terry Yin

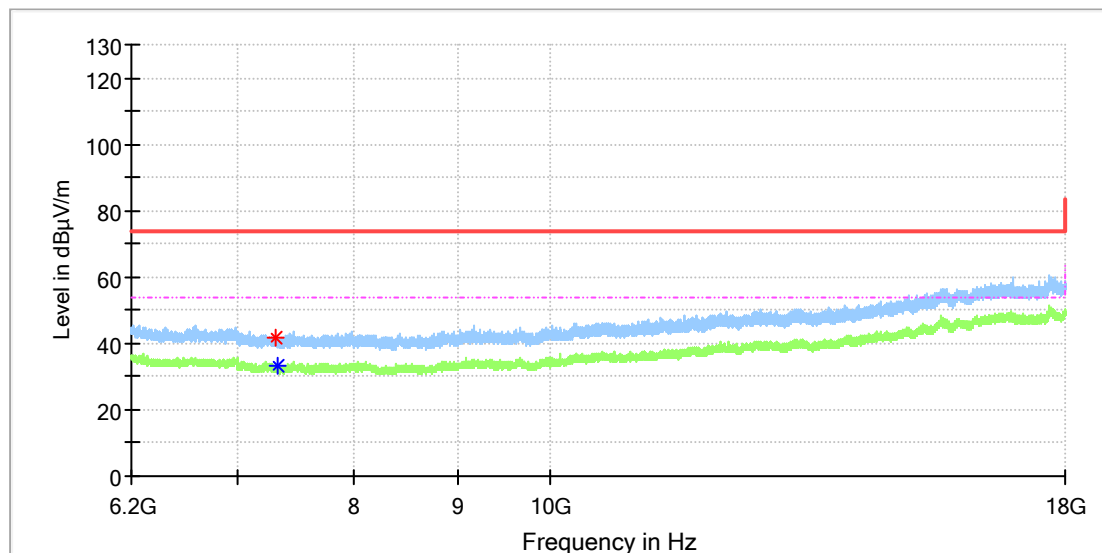


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4878.500000	50.70	---	74.00	23.30	100.0	V	56.0	11.8
4893.000000	---	39.52	54.00	14.48	100.0	V	357.0	11.8

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

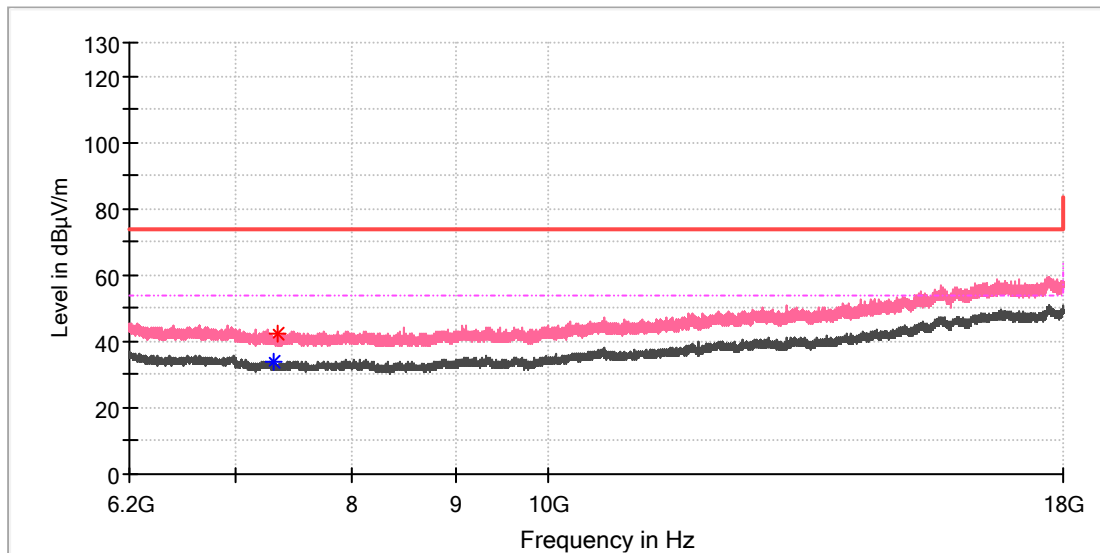


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7310.183333	41.56	---	74.00	32.44	100.0	H	133.0	8.2
7319.525000	---	33.00	54.00	21.00	100.0	H	233.0	8.2

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Mid channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

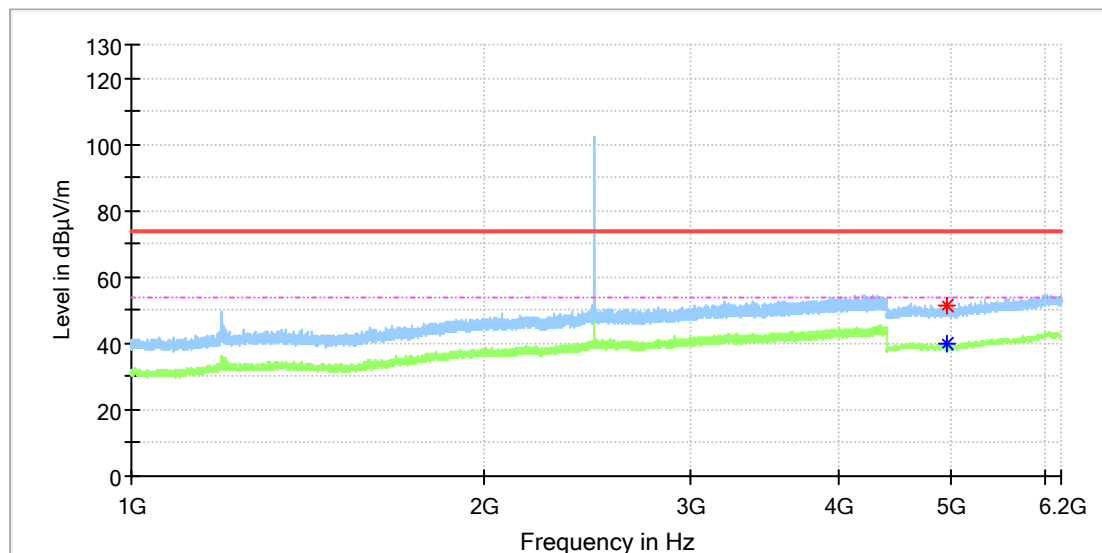


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7305.758333	---	33.56	54.00	20.44	100.0	V	264.0	8.3
7346.566667	42.27	---	74.00	31.73	100.0	V	180.0	8.1

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

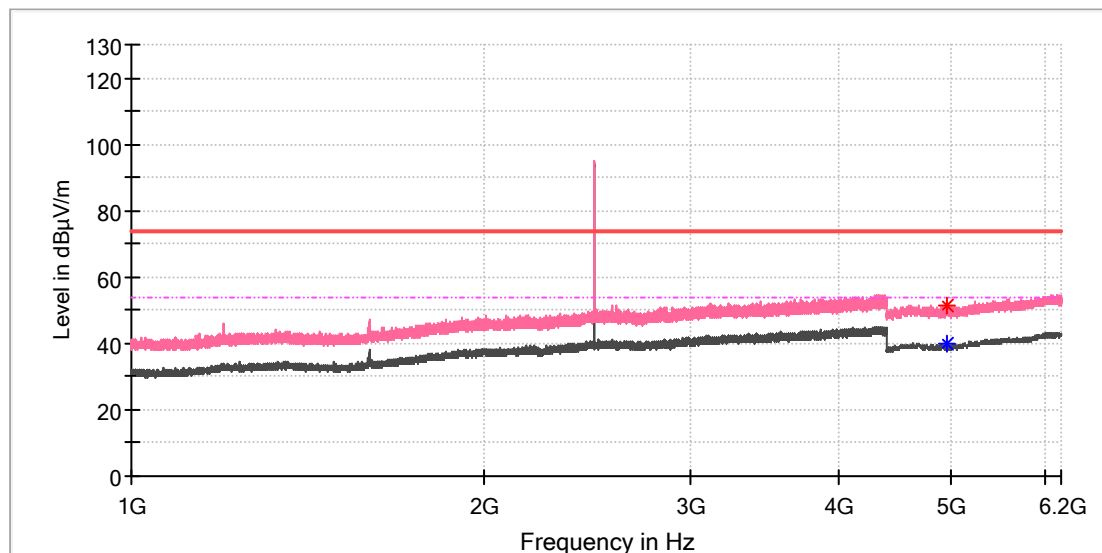


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4952.000000	51.23	---	74.00	22.77	100.0	H	170.0	11.8
4959.500000	---	40.08	54.00	13.92	100.0	H	176.0	11.8

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

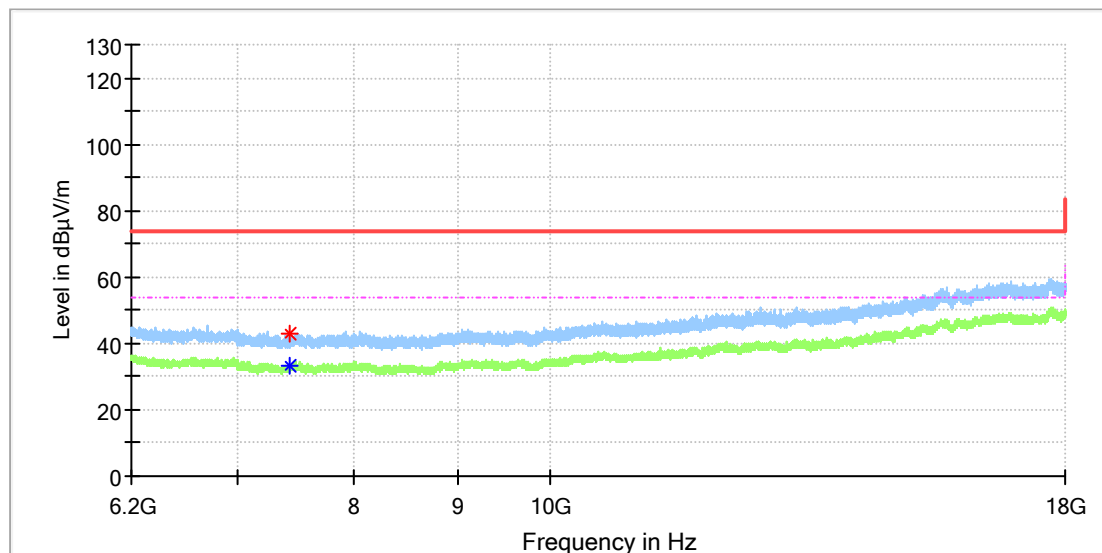


Critical Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
4957.000000	51.11	---	74.00	22.89	100.0	V	299.0	11.8
4960.000000	---	39.64	54.00	14.36	100.0	V	223.0	11.8

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

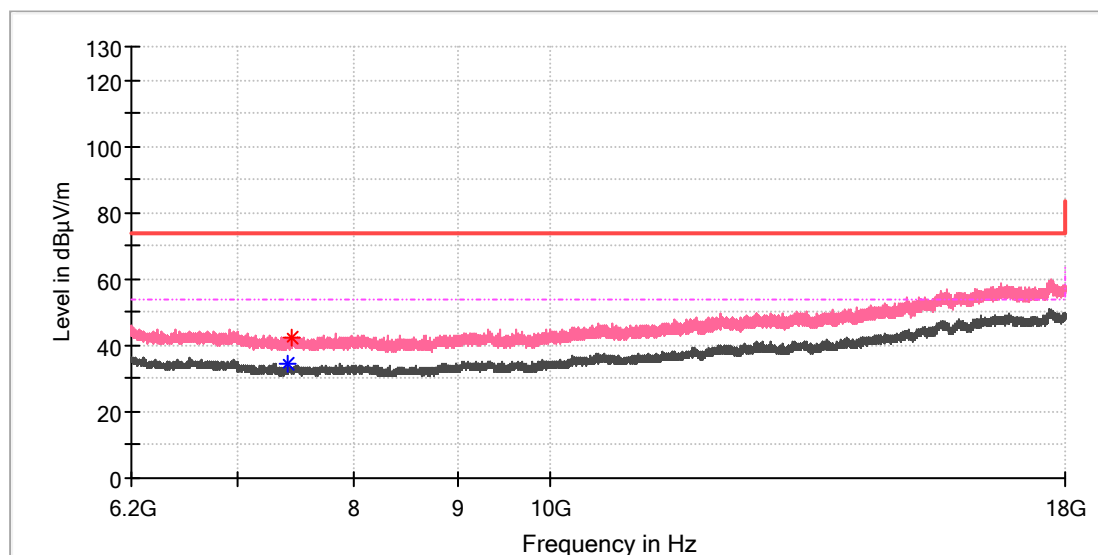


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7426.708333	42.67	---	74.00	31.33	100.0	H	45.0	8.4
7428.183333	---	33.42	54.00	20.58	100.0	H	45.0	8.4

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



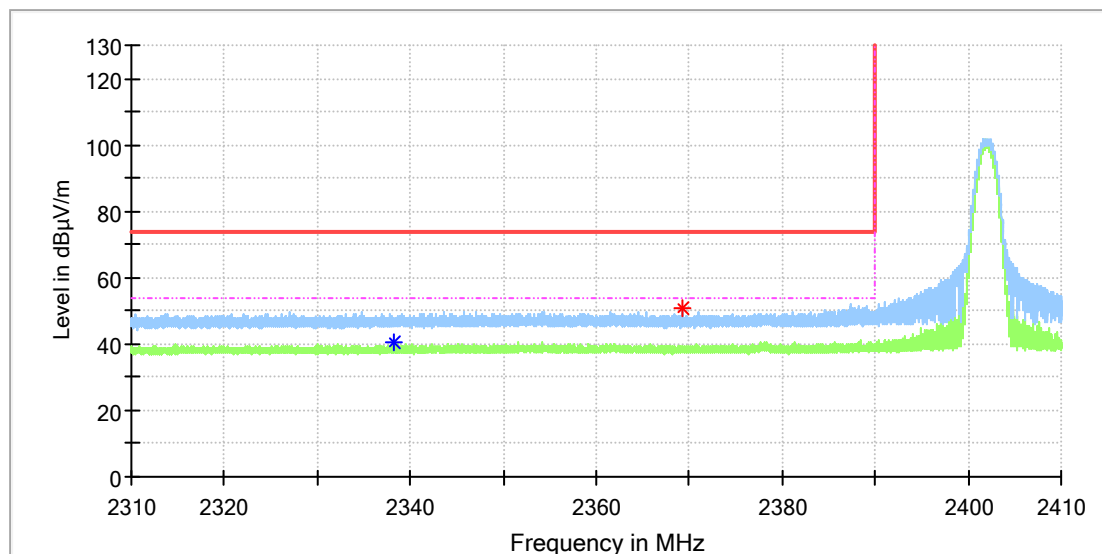
Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
7408.516667	---	34.49	54.00	19.51	100.0	V	308.0	8.3
7443.916667	42.51	---	74.00	31.49	100.0	V	204.0	8.5

Appendix C.6: Test Results of Radiated Emissions in Restricted Bands

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

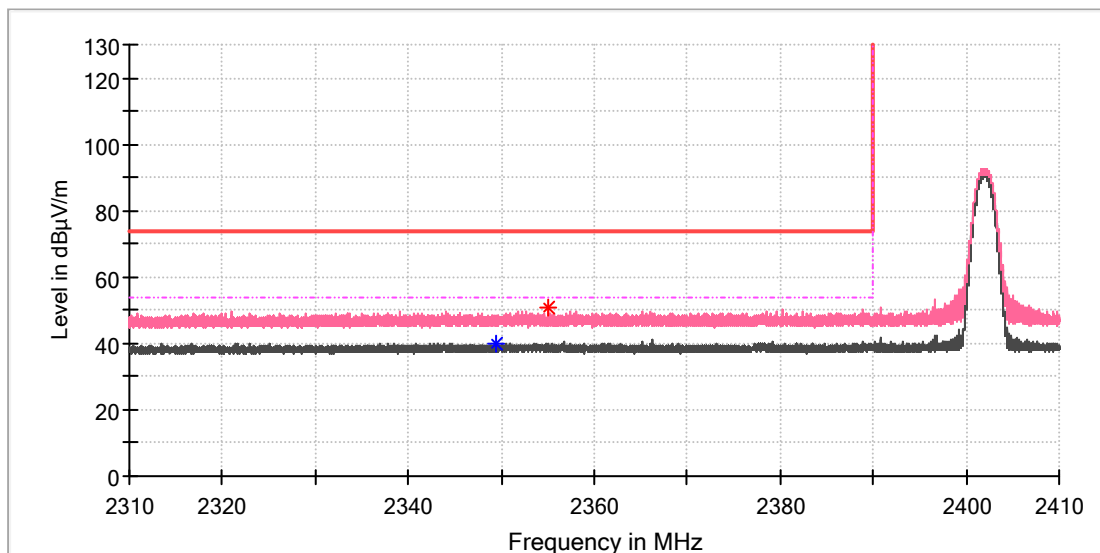


Critical_Freqs

Frequency (MHz)	MaxPeak (dBμV/m)	Average (dBμV/m)	Limit (dBμV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2338.220000	---	40.68	54.00	13.32	100.0	H	145.0	6.8
2369.225000	50.80	---	74.00	23.20	100.0	H	331.0	6.9

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_Low channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

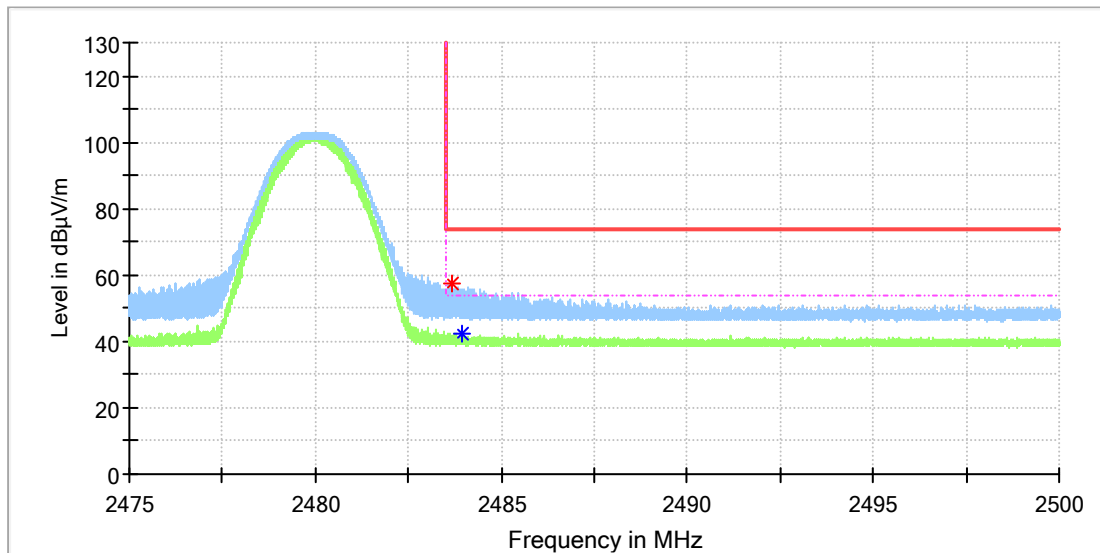


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2349.425000	---	39.99	54.00	14.01	100.0	V	162.0	6.9
2355.020000	50.51	---	74.00	23.49	100.0	V	207.0	6.9

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin

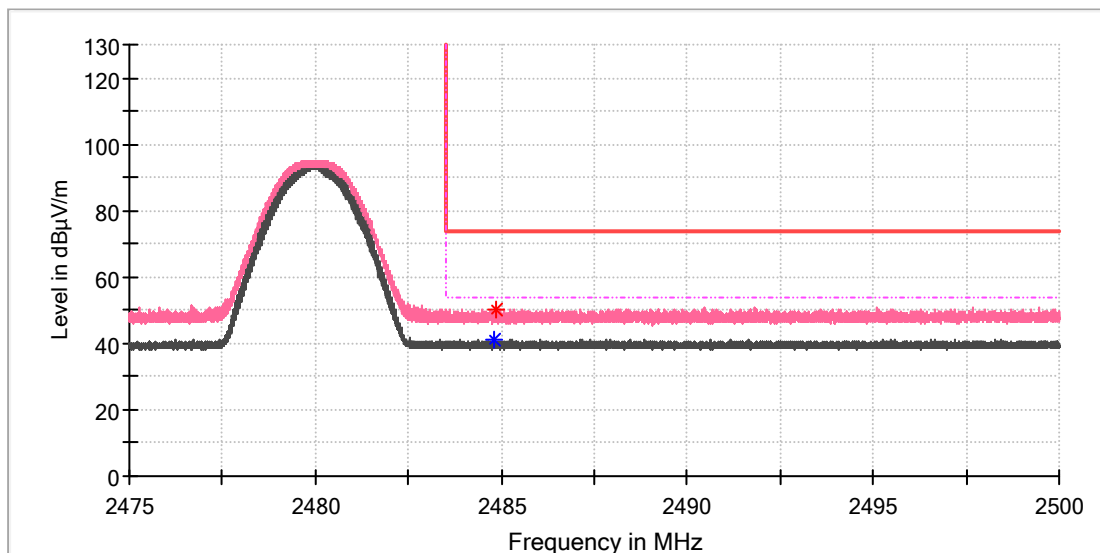


Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2483.648750	57.16	---	74.00	16.84	100.0	H	228.0	7.4
2483.932500	---	42.17	54.00	11.83	100.0	H	304.0	7.4

EUT Information

EUT Name:	Degrii Smart Thermostat
Model:	THM
Test Mode:	BLE 1M_High channel
Order No/Sample No:	168392703/A003345059-001
Test Voltage:	120V/60Hz
Remark:	Temp 23 Humi:56%
Test Standard:	FCC 15.247
Tested By:	Kei Zhang
Reviewed By:	Terry Yin



Critical Freqs

Frequency (MHz)	MaxPeak (dBµV/m)	Average (dBµV/m)	Limit (dBµV/m)	Margin (dB)	Height (cm)	Pol	Azimuth (deg)	Corr. (dB/m)
2484.802500	---	41.00	54.00	13.00	100.0	V	281.0	7.4
2484.865000	50.39	---	74.00	23.61	100.0	V	92.0	7.4